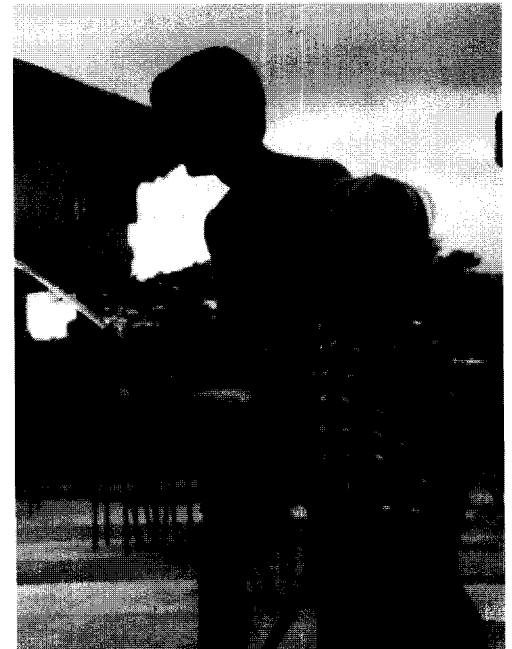
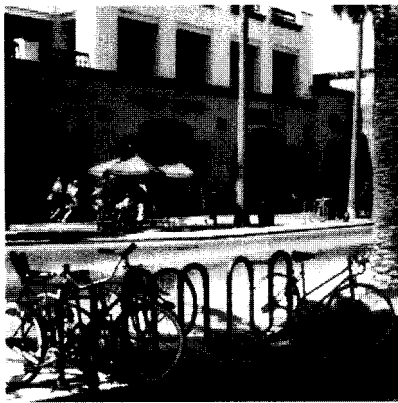


Smart Growth Strategies to Accommodate Orange County's Future



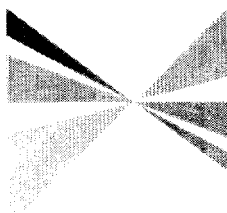
Smart Growth Strategies to Accommodate Orange County's Future

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Orange County Council of Governments

SOUTHERN CALIFORNIA



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“We shape our buildings; thereafter, they shape us.”
- Winston Churchill

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Introduction

James B. Trefethen, in studying 200 years of landscape change in America, concluded that "Nothing in nature is more constant than change. Man, through his inventions and two centuries of dredging, gouging, building, changing and environmental tinkering, now is a force second only to climate in influencing the character of the landscape." [1] Although some may take exception to the use of terms such as "gouging" to describe the growth and development of Orange County, California, it is without doubt that this area's landscape has at least been "environmentally tinkered" with during the past two centuries.

Tracking the growth of population provides insight regarding how the 798 square-mile county has changed in recent history. In 1850, Orange County reported a population base of nearly 500 residents [2]; 40 years later, the County had grown to more than 13,000 residents, at that time asserting its size and independence from Los Angeles by forming its own county. Visionaries at the turn of the century predicted significant changes for the area, estimating that as many as 500,000 might eventually call Orange County "home." [3]

These prognostications for Orange County growth fell far short of what has actually occurred; certainly no one at that time could have foreseen the massive growth that would take place during the next century. According to 1995 U.S. Census Bureau statistics, Orange County now ranks as the country's fifth most populous county, exceeding that of the entire metropolitan areas of

County Population Rankings: 1995

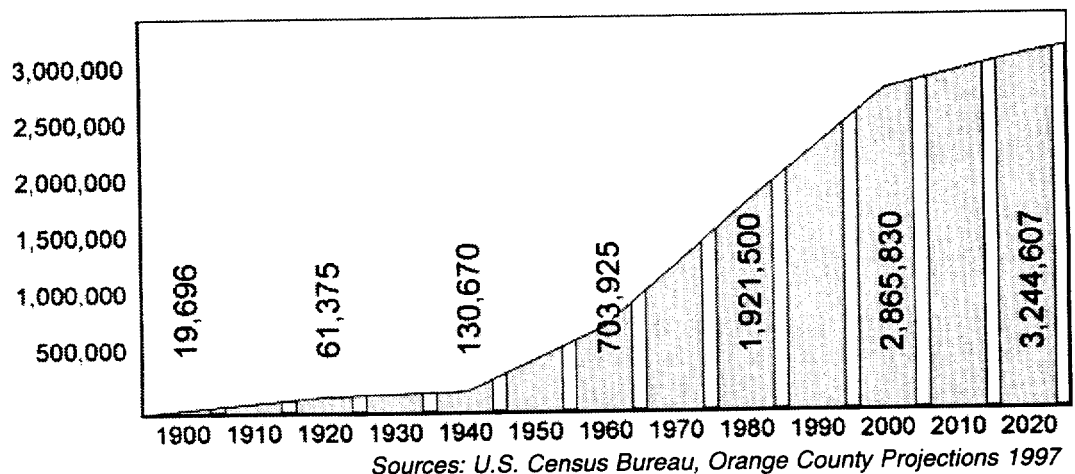
County	Population
Los Angeles, CA	9,138,789
Cook County, IL	5,136,877
Harris County, TX	3,076,867
San Diego, CA	2,644,132
Orange County, CA	2,563,971
Maricopa County, AZ	2,432,372
Kings County, CA	2,244,021
Wayne County, MI	2,055,500
Dade County, FL	2,031,336
Queens County, NY	1,963,628

Source: United States Census Bureau

Phoenix, St. Louis, Baltimore and Pittsburgh. The county's population density exceeds Los Angeles County and is among the highest in the nation, exceeded only by New York and Jersey City. [4]

While the county's population "boom years" - primarily the decades of the 1960s and 1970s which saw Orange County's population nearly triple to nearly two million people by 1980 - are not

Orange County Population Growth: 1910 - 2020



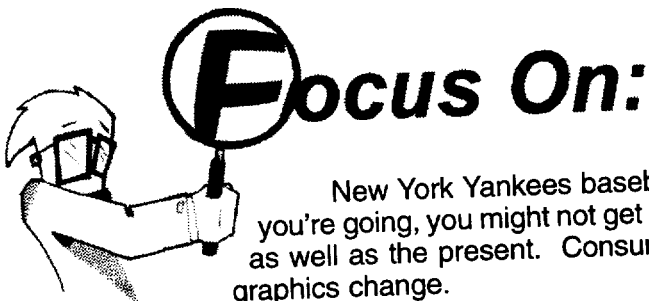
forecasted to be experienced again, Orange County's growth is far from over. Demographic projections approved by the Orange County Council of Governments indicate that an additional 576,747 people will locate in Orange County during the next 25 years. [5] This means that each year between now and the year 2020, Orange County's population growth will be roughly equal to adding a city the size of the Cities of San Juan Capistrano, Laguna Beach or Seal Beach. This growth will total 1.3 million people during the forty-year period from 1980 through 2020. During this same time frame, the county will also experience annual growth of some 10,000 new housing units built and 35,000 jobs created.

This growth will not be confined to new communities and undeveloped spaces in south

Orange county, but will also occur in the developed central, western and northern areas that are already considerably dense and generally thought of as being "built out." The challenges to both new and older communities in Orange County for accommodating continued growth and for maintaining the subjective "quality of life" will be significant.

Orange County Growth: Contrary to Popular Perception

Orange County is a place that is both widely known and misperceived as it presents a number of images in the national media. Whether its primary fame today stems from being the home of Disneyland or more recently from the 1994 bankruptcy of county government, typical "outsider" images of Orange County are often focused on extremes rather than on the mainstream. Bankruptcy, Richard Nixon, Bob Dornan, million-dollar homes,



Focus On:

Demographic Changes

New York Yankees baseball legend Yogi Berra once said, "If you don't know where you're going, you might not get where you want to be." Planners need to plan for the future as well as the present. Consumer values and living preferences are changing as demographics change.

Demographic studies indicate a growing desire for community, open space and town-centered living with less reliance on the automobile. Demographic shifts support these trends. The phrase "typical family," meaning a married couple with children, described 40 percent of all households a generation ago; it now accounts for only 26 percent. Homebuyers are getting older, too. A third of the homebuying market is over the age of 45. In surveys published by the National Association of Home Builders, most of this market segment prefers to live in communities with a diversity of ages and thus a diversity of housing sizes and types. Three of their top four location priorities were based on ease of transportation and access to shopping, family and friends, and medical care. Most of the mature homebuyers who intend to move will move to smaller houses with smaller yards to reduce cleanup and yard work. Mature buyers' preferences, in combination with the overall trend in the United States toward smaller households, will mean a greater market for smaller houses on smaller lots, especially where density's perceived problems can be solved through smart design applications.

Orange County will experience an 88% increase in seniors (age 65 and over) between now and 2020. 465,000 seniors will live in the county at that time. The number of persons ages 55 and older will increase by 110 percent, from 438,000 in 1995 to more than 930,000 persons by 2020.

Sources: Froehlich, Maryann. "Smart Growth: Why Local Governments are Taking a New Approach to Managing Growth in Their Communities," *Public Management*, Vol. 80, No. 5; 1997.

California State University, Fullerton, Center for Demographic Research.

conservativeness, neatly-manicured master-planned suburbs, amusement parks and beaches comprise the Orange County stereotype and are often among the initial responses to the question "What do you think of Orange County?".

Many areas of Orange County do fit the stereotypical "wealthy white suburb" description; but the subregion is far from being an atypical place that has no relation to its adjacent neighboring counties, or mainstream America for that matter. Historical demographic data provides another picture of Orange County - one of a county that is transitioning from its former standing as a Los Angeles area suburb to an ethnically diverse, urbanized subregion that now faces many of the challenges previously thought to be nonexistent within its boundaries. [6] During the last half century, the movement of people and jobs in Southern California to the suburbs has resulted in more traffic congestion, noise, pollution, and overcrowding of public facilities in these areas. Rapid increases in minority populations, resulting largely from migration from Los Angeles and from foreign immigration, dispel the myth of a racially homogeneous Orange County. Hispanics and Asians now make up about a third of the county's population, and in many cities Anglos constitute less than a majority of residents. Projections indicate that the trend toward ethnic diversity will continue within Orange County. In 1995, Hispanic, Asian, and African-American ethnic groups combined represented 41 percent of the total population. By 2020, these groups will comprise 61% of the county's population. [7]

Compared with the nation on major social and economic indicators that typically reflect high social status, Orange County does not emerge as a

highly affluent suburban region, not ranking among the top twenty-five counties in terms of home ownership, college graduates, or median household income. [8] In other words, Orange County is not as different from other urban/suburban places across America as people think.

The Regional Picture

During the last half century, the movement of people and jobs in southern California to the suburbs has resulted in more traffic congestion, noise, pollution, and overcrowding of public facilities in these areas.

Orange County will need to spend \$15.7 billion in transportation improvements during the next 23 years just to maintain current levels of congestion.

The County's projected future growth comprises only a portion of that forecasted for the six county area that comprises most of southern California. The Southern California Association of

Governments (SCAG), the regional planning agency responsible for developing growth forecasts and long-range transportation plans for the counties of Orange, Los Angeles, Riverside, Ventura, San Bernardino and Imperial, estimates that future population growth for the region will add 6.7 million residents to the 16 million current residents. Since the areas projected to have the greatest population increases are not the same areas where major employment growth is expected to occur, the

strain on the transportation network and related congestion, pollution, and infrastructure shortfalls are likely to continue to worsen. [9] SCAG's

recently-approved Regional Transportation Plan, a blueprint plan guiding transportation planning and programming decisions for the next 20 years, shows that even with a wide range of transportation/transit improvements (costing \$82.5 billion) the region will experience a tenfold increase in gridlocked freeways and a 70% increase in average travel delay. [10] Similarly, the Orange County Authority's (OCTA) long-range planning document, "FastForward: Transportation Solutions for the Next Generation," calls for \$15.7 billion in spending during the next 23 years just to maintain

current congestion levels in Orange County. [11]

Although the distribution of people and employment growth throughout Southern California has led to and will continue to exacerbate traffic congestion and strain the automobile-oriented transportation network, transit ridership in the region has actually decreased for more than a decade. SCAG reports that regionwide transit ridership has dipped in the last twelve years from approximately 570 to 470 million annual riders. [12] Conversely, bus ridership in Orange County is on the increase, where boardings have increased by 400 percent from 1975 (10 million boardings) to 1998 (51 million boardings). Whether the regional ridership levels can be attributed to the economy, bus fares, transit routes and service or a combination of these and other factors is unknown. However, future population growth, demographic and ethnic trends, and projected increased congestion would appear to indicate that the region's and Orange County's transit-oriented population and needs will increase considerably during the next 25 years. It would be unwise not to plan for commensurate demands on the transit system.

Planning for the Future in Orange County

Can the region generally, and Orange County specifically, accommodate continued massive growth and maintain or improve the quality of life that made Southern California so desirable decades ago? Probably not, if the conventional development practices that have served past growth and suburban sprawl continue. If afforded the chance to re-plan and re-build the region again starting from a clean slate, would the built landscape look significantly different than it now does? Probably so, but obviously such an opportunity does not exist. Adherence to the development patterns of the past, although likely to continue in many areas, are not likely to be as

successful (or even practical) in accommodating all future anticipated new growth as it was previously, since considerable

amounts of growth will occur in areas that are already developed. New planning approaches will be needed to address and coincide with the county's maturation into a more dense, urban subregion with a clearly different demographic profile than what currently exists or previously existed.

John Alexander states that, "Improving a city clearly calls for organized schemes and efforts.

Future population growth, demographic and ethnic trends, and projected increased congestion would appear to indicate that the region's and Orange County's transit-oriented population and needs will increase considerably during the next 25 years. It would be unwise not to plan for commensurate demands on the transit system.

Cities do not grow spontaneously into efficient areas of human habitation. In fact, a city is like a house. One can build a house by the hit-and-miss method, a room here, a room there, and continue to tack on rooms and additions from time to time as needs arise. But no part of such a house is related, by forethought, to any other part: They just happen to be built against one another. The result is a monstrosity that is badly designed, awkward, inefficient, and costly to maintain. The tragic fact is that most cities have grown just this way - without forethought of plan or pattern. The settled areas have continually expanded and spilled over haphazardly into the hinterland. From time to time new sections are tacked on the community, and the result is often a monstrosity with fantastic street patterns, awkward traffic snarls, areas of blight - all of which makes for a less efficient community, one that is increasingly expensive to service and maintain." [13]

Factoid: By the year 2020, 12 Orange County cities will have higher population densities per square mile than the City of Detroit, Michigan. Five additional cities: Dana Point, Fountain Valley, Fullerton, Lake Forest and Tustin will be nearly as dense.

Source: California State University, Fullerton, Center for Demographic Research

Alexander's passage provides, in a broad sense, an interesting parallel to how much of Southern California's and Orange County's development occurred during its periods of rapid growth subsequent to World War II through the 1970s. During that time, Orange County evolved and grew in a manner lockstep with three closely related trends that have increasingly characterized American civilization in the later decades of the twentieth century which include: 1) the displacement of populations from urban cores to urban peripheries (in 1950, only 23% of Americans lived in suburbs; today suburbs comprise more than 50% of the population) [14], 2) the concentration of economic growth in areas at the edges of urban centers, and 3.) dependence on the automobile. As a burgeoning bedroom community to Los Angeles in the 1950s, Orange County became a favored location for young families who desired to reside a certain distance from the urban core. Relative proximity to employment, new and affordable housing, new schools, shopping, and safety were major components that contributed to the rapid transformation of the formerly agricultural Orange County landscape to an area today whose population density rivals major metropolitan area densities in the United States.

Typical of trends occurring across the nation, Orange County's suburban lifestyle has become popular to the point of being unraveled due to its desirability. The urban woes that many sought to escape by moving to Orange County have appeared as the area urbanized. Left behind in the county's continuing sprawl are thousands of 1960s Era tract homes and

commercial strip developments that are too old, small and unfashionable to attract middle-class buyers and investors. The result is a new American phenomenon, the suburban slum, which is gaining a foothold in several Orange County communities. Now, as the region continues to grow, planners must look differently on how best to accommodate what will be increasingly an aging population in a more dense urban setting.

New planning approaches will be needed to address and coincide with the county's maturation into a more dense, urban subregion with a clearly different demographic profile than what currently exists or previously existed.

Relative proximity to employment, new and affordable housing, new schools, shopping, and safety were major components that contributed to the rapid transformation of the formerly agricultural Orange County landscape to an area today whose population density rivals major metropolitan area densities in the United States.

Orange County did not just appear out of nowhere in the 1950s. Its pattern of growth coincides with Nineteenth Century patterns and activities that have contributed to the development of today's suburbs.

Although forms of suburbs are known to have existed in cities developed much earlier, with the advent of the railroad between 1850 and 1920, plus the coming of the electric trolley in the 1880s, "modern" suburbs began to frequently develop on the margins of many large cities. Early suburbs were small, rarely having populations of more than 5,000, and generally consisting of a number of settlements strung out along the railroads radiating from the main cities. So long as railroad stops and walking distance to them controlled the size of the suburb, it had a form that was quite compact.

From the beginning of the rise of suburbs in the Nineteenth Century, suburban residents were typically those with the greatest wealth, and the suburbs that developed were populated with the high and middle

income groups. [15] As is the case today, when workers had gained the means needed, they often tended to escape the overcrowded, undesirable conditions of the city by moving to an adjacent community where living conditions were perceived

as being better. The coming of the private automobile in the early Twentieth Century heralded the era of mass suburbia in which the flight from central cities continued.

Suburban Boom Towns - Populations of Selected Orange County Cities

City/year of incorporation	1950 population	1960 population	1970 population
Brea / 1917	3,208	8,487	18,447
Fullerton / 1904	13,958	56,180	85,826
Anaheim / 1878	14,556	104,1854	166,701
Santa Ana / 1886	45,533	100,350	156,601
Huntington Beach / 1909	5,237	11,492	115,690

Source: Center for Demographic Research, CSUF, April Decennial Census of Population

Several north and west Orange County cities, Brea, Fullerton, Anaheim, Santa Ana and Huntington Beach to name a few, were established long before the era of mass suburbia. Their populations, prior to suburban growth, were relatively small, and these areas remained largely agricultural. They existed as "places" largely because of the existence of rail stops in or near these areas, in a manner where the land uses required to service these communities were proximate.

What separates these and the other "established" Orange County cities from most of Orange County's new communities today is that they possess basic and traditional planning infrastructure which originally defined them as places apart from and prior to the suburbanization of the current largely automobile-dependent Orange County. In other words, these communities were established early-on as cities and developed the requisite central business cores and other services needed by their residents. To this day, such areas maintain a sense of place or community identity that is largely absent in those Orange County communities that have more recently evolved in an environment where the automobile has made it less necessary to be near places of work, school, recreation, and worship. Developed first as unincorporated products of urban sprawl and then incorporated as cities, many of Orange County's newer cities lack central business hubs, recognizable government centers, and central parkland areas, all of which are identifiable

components of established jurisdictions and collectively contribute to a community's sense of place.

Orange County cities that have recently incorporated are now trying to carve out spaces that will give them a sense or enhanced sense of community identity. Many of these communities, such as Laguna Hills, Laguna Niguel, and Lake Forest were built quickly in the 1970s and 1980s as unincorporated areas under the jurisdiction of the County of Orange. Absent a vision of or blueprint for potential future cityhood, the County routinely approved massive development proposals in the unincorporated areas for "planned communities" to satisfy the demand for suburban housing by those looking, in many instances, to escape urbanized and now "less desirable" county areas. "Having acreage set aside for City Hall, recreation facilities and parks wasn't important to the county," a former Laguna Hills City Councilmember said. "The supervisors responsible for planning never recognized the development of South County as a region [that would someday] form several cities." [16] Now with more localized oversight, and cognizant of the need for unique landmarks, many of the cities that incorporated between 1987 and 1991 are actively planning or building town centers, areas where citizens can congregate or for other uses that will distinguish their communities and serve additional residents. [17]

These desires to create public spaces and localized identities are not unique to southern Orange County.

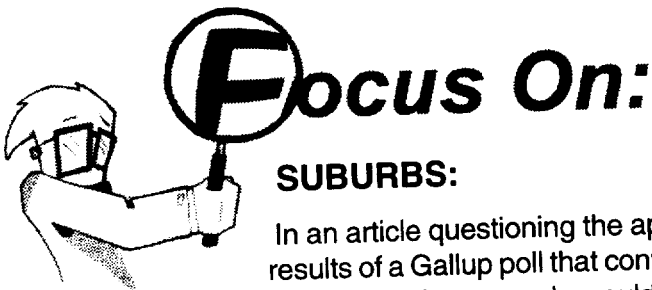
Cities like Cypress, which also developed rapidly as a suburb of Los Angeles, are also looking to establish an identity and sense of place. In its efforts to revitalize Lincoln Avenue, once described as "just the fastest way to the 605 freeway," [18] the city is examining how to boost pedestrian traffic along the avenue by lining it with trees, fountains, and cafes to create a "village effect."

Livable Communities: Setting the Stage

The desire to establish community identities and/or to create a sense of place in both new and established communities by otherwise revitalizing the local landscape and economy has gained significant interest in recent years. Some are now reconsidering many of the basic planning techniques that have driven development during the past 50 years. During that span, land use was traditionally arranged in a low density pattern, due to and now fostering an almost complete reliance

on the automobile to meet transportation needs. Such development patterns have afforded personal benefits such as quieter residential neighborhoods, comparably large lot sizes, privacy, and security. However, the benefits have come at great cost which, in many cases, erodes the benefits themselves. High infrastructure investments required to serve thinly settled areas inefficiently consume personal and public resources and raise home prices. Personal and work time spent behind the wheel of a car continue to increase with no real sign of relief.

Related discussions include linkages among land use patterns, transportation, and air quality. Southern California, despite significant improvements in the last 20 years, still has the worst air quality in the nation. [19] Given that daily vehicle trips into Orange County are projected to increase from 7.9 million to 11.6 million during the next 20 years [20], it is certain that unless radically different, low-polluting automobile technologies come into common use, ever-increasing automobile travel could possible reverse years of progress in



Focus On:

SUBURBS:

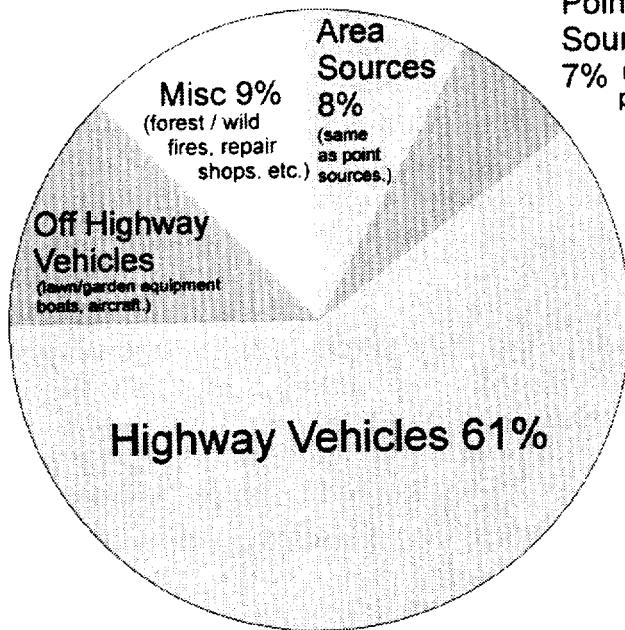
In an article questioning the appeal of modern suburbs, author Karl Zinsmeister cites the results of a Gallup poll that conveys America's relative indifference to suburban life. When the poll asked where people would most like to live, only 25% selected a suburb. The largest number by far, 37%, wanted to live in a small town. "People accept suburbs," Zinsmeister says, "but they aren't particularly enthusiastic about them."

The author also notes that today's typical suburban development is desirable to families not so much for what it is as for what it isn't. "It is not dirty, not racially tense, not uncivil, and not plagued with broken down public services and disastrous schools as most of today's cities are. The suburb is thus a kind of anti-location which, while hardly ideal, is well-hedged against the opposing rural and urban risks of modernity."

In noting that the typical suburbanite will travel the equivalent of more than 20 times around the globe in a lifetime of commuting, Zinsmeister states that suburban homes are little more than "... evening leisure centers and weekend crash pads."

Source: Zinsmeister, Karl. "Are Today's Suburbs Really Family-Friendly?" *The American Enterprise*, November/December 1996.

Sources of Air Pollution



Point Sources

7% (manufacturing, dry cleaning, painting, and surface coating, etc.)



pedestrian and bicycle facilities. States have been given discretion to use certain federal highway funds for

pedestrian, bicycle, and transit facilities as well. The Federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 required metropolitan transportation planning processes to reflect sound planning principles, including the overall social, economic, energy and environmental effects of transportation decisions and the

relationships between transportation and short- and long-term land use. [24] One of the most dramatic examples of how transportation planning changed under ISTEA was the linkage

improving air quality. Approximately 60% of emission sources in the South Coast Air Basin, which includes Orange County, come from cars, trucks, and buses. [21] In fact, vehicle travel within Orange County has grown faster than the rate of population growth since 1980, probably resulting largely from a continuing approach of separating land uses. The result of this kind of planning is more vehicle trips and longer trip lengths. [22] Because motor vehicles are the predominant source of air pollutants, measures to reduce the number of vehicle trips and/or shorten trip lengths provide some opportunities for emission reductions. [23]

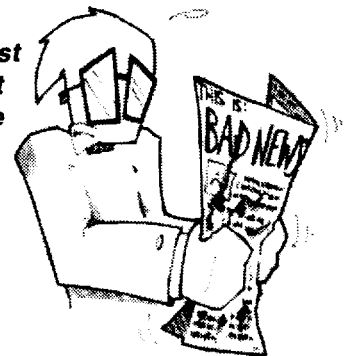
with the transportation conformity requirements of the Federal Clean Air Act (CAA) Amendments. In air quality non-attainment areas such as the South Coast Air Basin, transportation plans and programs which are financed wholly or partly with Federal aid and are "regionally significant" projects are required to be in conformance with the transportation provision of the SIP, the statewide planning document which demonstrates how each State will attain national ambient air quality standards. [25] In the SCAG region, such requirements to consider the linkages between transportation and air quality planning have served as a catalyst to encourage broader thinking about the impacts of transportation investments.

State and federal governments have increasingly been emphasizing programs to change travel behavior. Since 1991, more state and federal funding has been designated for

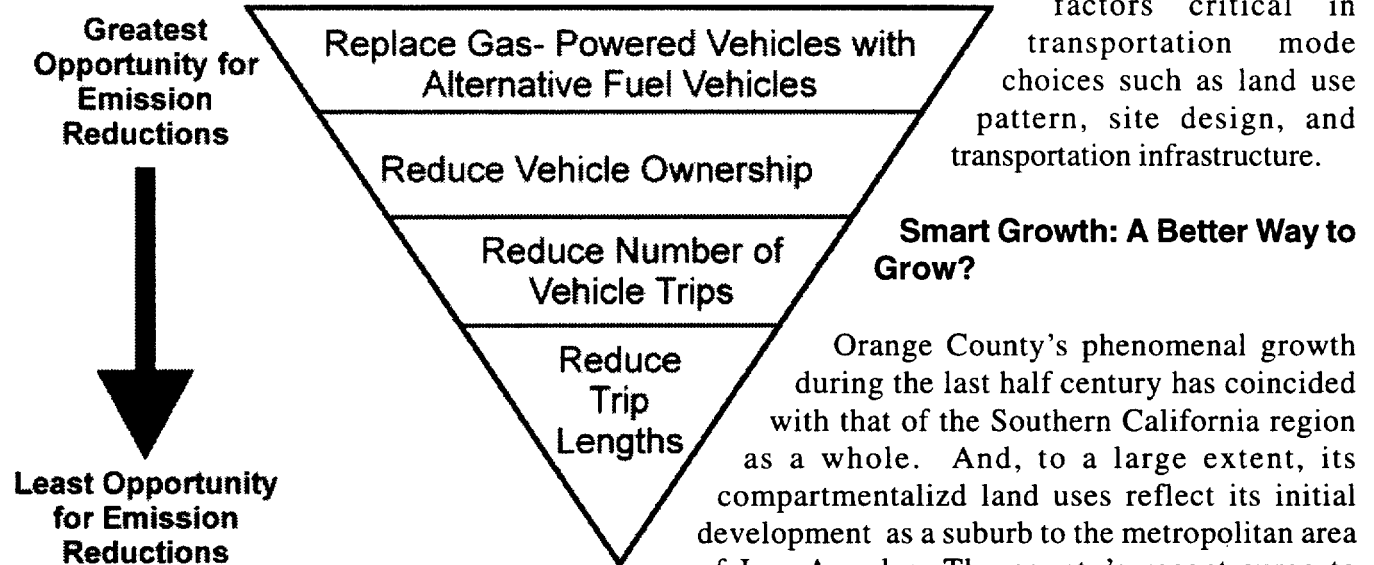
Notwithstanding the above, the region's air quality continues to



Southern California, despite significant improvements in the last 20 years, still has the worst air quality in the nation. Given that daily vehicle trips into Orange County are projected to increase from 7.9 million to 11.6 million during the next 20 years, it is certain that unless radically different, low-polluting automobile technologies come into common use, ever-increasing automobile travel could possible reverse years of progress in improving air quality.



Vehicle Emission Reduction Opportunities



improve despite considerable growth in vehicle travel, due largely from reductions in vehicle-emission rates. In essence, new, cleaner-burning vehicles are replacing older, higher-polluting vehicles over time. However, when the fleet of older vehicles is replaced, many believe that the increasing number of vehicles, albeit cleaner burning, will cause emission levels to rise again. While advances in alternative fuel technologies are probably the best prospect for reducing vehicle emissions and will likely more than mitigate projected increases in vehicles, vehicle trips, and vehicle miles traveled [26], reducing vehicle trips and trip lengths are also viewed as solutions for realizing continued emission reductions.

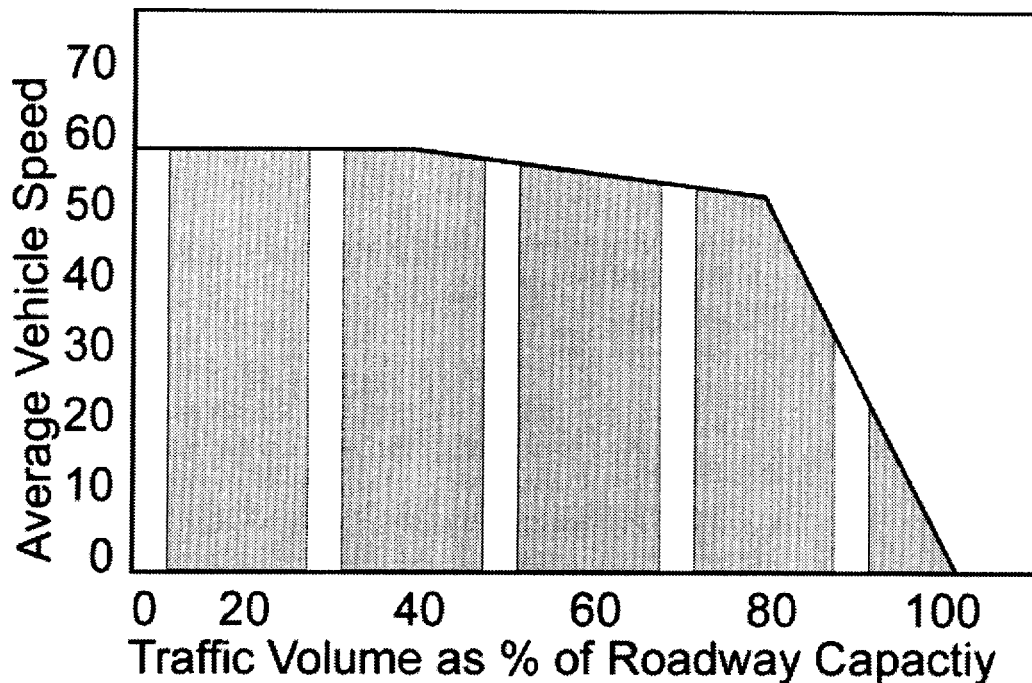
Factoid: 75% of people shopping for new homes indicate that they would prefer to live "where they can walk or bicycle everywhere."

Source: "Buyers hate tacky suburbs but aren't sold on new urbanism," Sacramento Bee. June 2, 1996.

However, technologically-advanced vehicles will not reduce levels of congestion, which, as discussed earlier, will continue to increase despite billions of dollars for transportation improvements planned over the next 20 years. This is the arena where local governments can contribute, as many measures such as land use decisions toward reducing motor vehicle usage are best implemented locally under the jurisdiction of cities and counties. Municipal

Separated land use, by design, increases the number of cars on regional arterials and freeways, further contributing to traffic congestion. Some municipalities have addressed this issue and other related issues through anti-or slow-growth ordinances. However, the intended effects are sometimes contrary to the objective when growth deterred in one area often appears somewhere else, often further away. The road network between these

Vehicle Speed vs. Traffic Volume on a Freeway Segment



As the volume of vehicles approaches a freeway segment's capacity, average vehicle speed remains fairly high until about 90% of the freeway capacity is reached. From that point on, freeway speeds drop dramatically. From a congestion standpoint, measures that can minimally reduce traffic volumes can significantly increase traffic flow.

jurisdictions face in trying to augment existing tax bases, provide jobs and amenities for residents and to otherwise enhance livability causes traffic hassles, disrupts and separates neighborhoods, and otherwise detracts from the character of the community.

Increasingly, cities throughout the nation are taking an active approach to building what are called "livable" or "smart" communities. The concept is seen by various professional

areas becomes even more congested and any potential air quality benefits from reduced vehicle trip lengths remain unrealized. [27]

Rather than simply aiming to maintain current planning practices and standards or even to slow or otherwise retard a perceived or real rate of urban decline, many are instead asking the question:

"Given the significant growth that is to occur during the next 20 years, how do we enhance the quality of daily life in Orange County and throughout Southern California?"

Granted, competing demands are a fact of life for local governments. Maintaining low taxes in a politically low- or no-tax mentality county and simultaneously providing adequate services in the face of regular revenue raids by State government is difficult. Likewise, the balancing act that local

architects, community activists, planners, and elected officials as a key strategy toward accommodating a portion of expected new growth and concurrently revitalizing, maintaining and enhancing existing neighborhoods and communities. Statewide, more than 100 cities and 18 counties have adopted some portion of the Ahwahnee Principles, sometimes under the title of

"neotraditional design", which describe major tenets of livable communities philosophy into their general plans. [28]

Within the SCAG region application of livable community concepts is viewed as a significant way to reduce and/or shorten automobile trips, thus

reducing congestion and improving air quality, meeting local, state and federal air quality requirements. SCAG's recently-approved Regional Transportation Plan calls for a 1.5 percent decrease

Factoid: Nationally, traffic congestion is responsible for 4% of the nation's total gasoline consumption.

Source: Texas Transportation Institute, 1990



Focus On: _____

THE AHWAHNEE PRINCIPLES:

In 1991, Peter Katz, author of "The New Urbanism," joined with a group of architects who had been leaders in developing new notions of land use planning in a meeting convened by the Local Government Commission. These innovators were asked to come to agreement about what it is that new planning ideas, from neotraditional planning to sustainable design, have in common and then to develop a set of community principles. They were then asked how each community should relate to the region and to develop a set of regional principles. Finally, they were charged with defining how these ideas might be implemented by cities and counties. The architects' ideas were drafted into a form which would be useful to local elected officials and would provide a vision for an alternative to urban sprawl. A preamble, topics of specific ideas, community principles, regional principles and implementation of the principles, was presented in the fall of 1991 to about 100 local elected officials at a conference at the Ahwahnee Hotel in Yosemite National Park.

An abridged version of what is now known as the Ahwahnee Community and Regional Principles is as follows:

Community Principles

- Contain a mix of facilities essential to daily life;
- Locate housing, jobs, daily needs/activities within easy walking distance;
- Locate as many activities as possible to transit stops;
- Accommodate different economic/age groups in the housing mix;
- Link job types to residents / local work force / economy;
- Enable access to larger transit network;
- Have a central focus; combine commercial, civic, cultural and recreational uses;
- Allow for "specialized open space" (greens, squares) where frequent use is encouraged by placement and design;
- Design public spaces to encourage "around the clock" use;
- Put as much thought into bike/pedestrian paths as is done for roads so people want to use them;
- Preserve natural terrain, drainage, vegetation; include examples in greenbelts and parks;
- Use design techniques that conserve resources and minimize waste;
- Provide for efficient use of water;
- Street orientation, placement of buildings and shading should contribute to energy efficiency of the community.

Regional Principles

- Integrate regional land use planning structure around transit instead of freeways;
- Greenbelts / wildlife corridors should define regions;
- Locate regional institutions (stadiums, government, museums, etc.) in the "urban core";
- Encourage development of local character and community through materials and methods of construction.

Source: Corbett, Judy and Velasquez, Joe. "The Ahwahnee Principles: Toward More Livable Communities," Western City, September, 1994.

in trips due to implementation of livable communities strategies. Locally, many cities are looking to implement livable communities concepts in order to bring new life to existing, often run-down or underutilized urban core or "downtown" areas. Thus, while there can be regional benefits to the transportation network and toward improved air quality, local initiatives toward livable communities are more often initially seen as a way of increasing a community's economic vitality. The idea enjoys such widespread popularity that it is probably best left without a single definition or objective. Rather, the concept "make it whatever you want it to be" allows for a combining of a number of principles and planning elements that, if implemented collectively, are able to enhance the quality of life in a neighborhood or community.

Notwithstanding the preceding statement, the following definition has been developed by SCAG's Blue Ribbon Advisory Committee on Creating Livable Places, and is offered here as a starting point for examining issues further and presenting strategies that can be considered for potential application in Orange County communities.

"A healthy mix of homes for all economic groups, shops, work places, parks and civic institutions, all within walking distance to each other, linked to public transportation and a center human in scale." [29]

This definition embodies, in simplified fashion, many of the prime tenets of the livable or smart communities concept, some of which will be

described more fully in this report. What is clear from the general SCAG definition is that the goal of livable communities is to better define the elusive concept of the public realm and its significance for the life of the city. In essence, smart growth is development that is environmentally, socially, and economically sound. While suburban growth will continue, local communities are increasingly realizing that the problems that accompany sprawl - traffic congestion, new and costly infrastructure expansion and increased demands on services, conflicts over growth and divisive communities, loss of farmland and open space - pose significant challenges for their future success.

Increasingly, cities throughout the nation are taking an active approach to building what are called "livable" or "smart" communities. The concept is seen by various professional architects, community activists, planners, and elected officials as a key strategy towards accommodating a portion of expected new growth and concurrently revitalizing, maintaining, and enhancing existing neighborhoods and communities.

The major tenets of smart growth include the investment of time, attention and resources in restoring community and vitality to center cities and older suburbs. Not limited to established areas, however, smart growth concepts also apply to new areas which can be town center, transit- and pedestrian-oriented, including a mix of housing, commercial and retail uses and preserving open space. Common smart communities components address topics

Nomenclature:

- Transit Oriented Design
- Neo-traditionalism
- Livable Communities
- The New Urbanism
- Smart Growth
- Urban Village

such as the following:

- remaking streets to encourage walking, bicycling, and transit use;
- retrofitting commercial corridors and malls to increase use and economic vitality;
- environmentally sound building and development;

- integrating land use and transportation planning with other issues such as environmental protection, economic development, social justice, and education;

- making the retail work in downtowns, town centers and main streets;

- collaborating successfully with businesses and schools;

- educating and involving the community, and creating effective public messages;

- building urban spaces conducive to public life for sociability and dialogue;

- establishing and maintaining architecture appropriate to the history of the city and / or region;

- developing urban tradition which enriches everyday life such as markets and community festivals;

- Establishing traditions that include children in urban planning and community events;

- Developing housing policies which do not prioritize segregation by income, and which, instead, combine housing, shops and services;

- Improving accessibility through walking and developing land use planning policies based on walking;

- Developing transportation policies that augment existing public transportation opportunities and provide partial taming of the automobile in specific areas / instances;

Not limited to established areas, however, smart growth concepts also apply to new areas which can be town-center, transit and pedestrian oriented, include a mix of housing, commercial and retail uses and preserve open space.

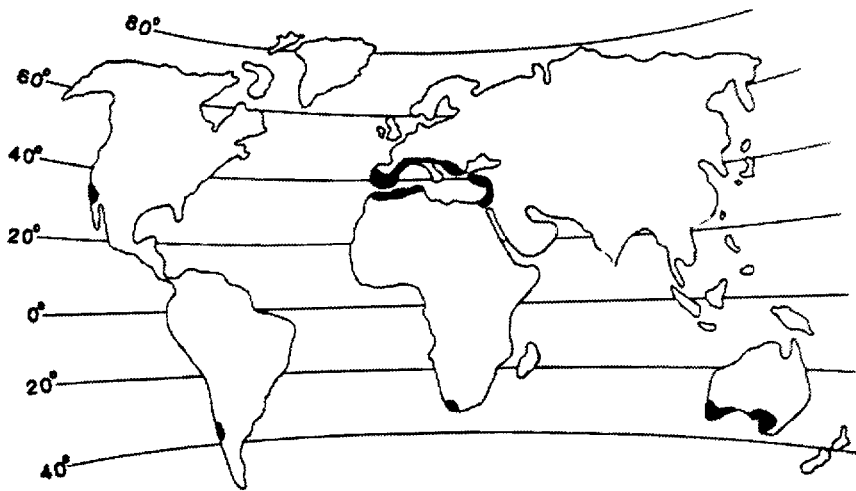
The establishment of smart communities or implementation of individual smart-community approaches is a long range goal, and should not be viewed as the sole cure to the range of urban woes

discussed previously. Application of livable neighborhood concepts will not immediately address or fix inner city disinvestment, suburban traffic congestion, regional air pollution, and the political malaise of a wary public. However, they can have a broad impact over time if this vision is adopted locally, community by community, and reinforced by regional metropolitan planning and economic policies.



Will it be easy to bring about smart communities concepts throughout Orange County? Probably not, since a number of implementation barriers and obstacles exist. Some issues cannot be addressed without cooperation from the state (i.e., fiscalization of land use pursued by local governments to augment revenues), but others are within local control and purview and, thus, can be implemented by cities and counties.

The Livable Communities concept's ability to address a number of urban issues contributes to its popularity.



• Mediterranean Climates Throughout the World

Few areas of the world benefit from geographic influences that create Mediterranean climates.

Smart Growth Applications for Consideration in Orange County

Despite its perception by outsiders as an 800 square-mile slab of blandness, Orange County enjoys considerable diversity. It's prime draw, like much of coastal Southern California, is a Mediterranean climate which occurs only in a few places in the world on the western side of continents in areas generally between 30 and 40 degrees latitude, where cool ocean currents serve to moderate temperatures and minimize humidity and rainfall. In addition to its over 40 miles of

Factoid: 14 Governors in 1998 have highlighted the need for new development policies in their state-of-the-state addresses. During the past 18 months, 11 cities in California have enacted urban growth boundaries.

Source: Froehlich, Maryann, "Smart Growth: Why local governments are taking a new approach to managing growth in their communities," Public Management, May, 1998, p. 7.

coastline, Orange County enjoys a certain degree of geographical diversity as well, with considerable hill and mountain areas resulting from tectonic activity. Local area fault zones, such as the Elsinore and

Whittier faults, have contributed to a physical landscape that not only provides several communities with character, but also serves to physically "separate" the County from three of its four neighboring counties. Further, the early settlement of towns such as Santa Ana, Newport Beach, Fullerton, Orange, and Anaheim has left in place a core of central business districts and distinct and historical (by Orange County standards) architecture that gives many of these places an individual identity and a sense of community. Likewise, some newer areas in the southern

portion of Orange County are incorporating aspects of neo-traditional planning into the design of communities in an effort to partially recapture the ambiance of small town or village life that to a certain extent exists in some of these older areas.

Whether Orange County communities find themselves in a position of planning for new growth, preservation, conservation, or aggressive economic development in attempting to improve the quality for the public, smart growth ideas and applications, from easy and inexpensive to difficult and costly, are numerous and varied. Several approaches and images for consideration by local jurisdictions are presented to provide a general idea of the types of actions that can be undertaken to orient future planning efforts toward some of the smart communities concepts.

STRATEGY # 1: CREATE / MAINTAIN COMMUNITY IDENTITY IN THE URBAN SETTING

- Prioritize Creation of Civic Spaces

Suzanne and Henry Lennard, in their book, Livable Communities Observed state that, "Keeping the center [of a city] a focus for civic, social and

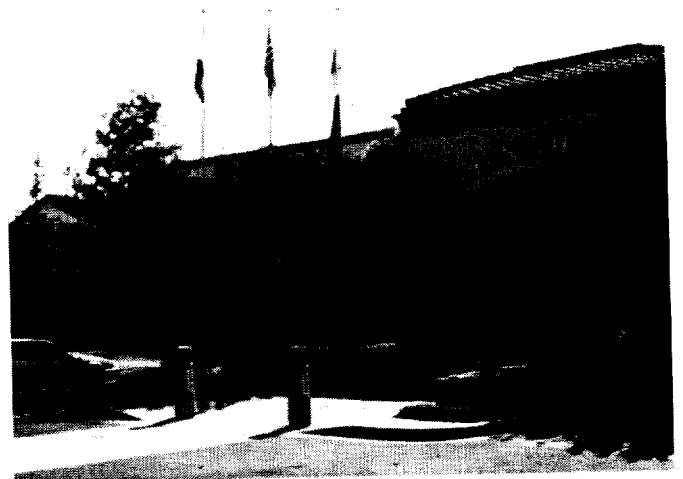
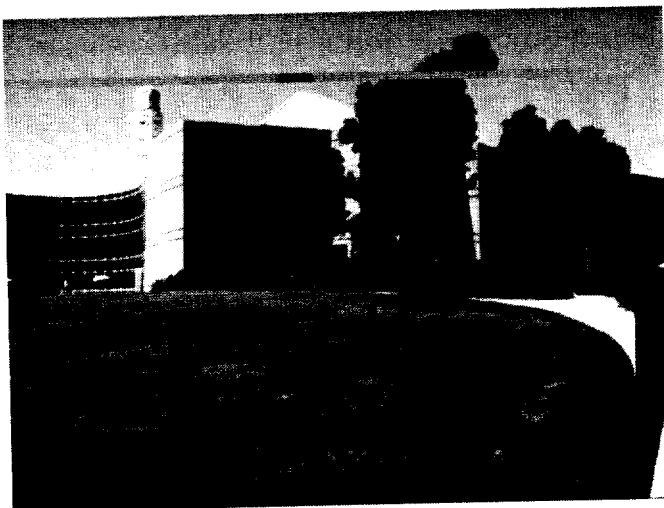
cultural life inspires in all city dwellers a sense of citizenship - a sense of being a full participant in the life of the city. In many cities, however, neither the city core nor the individual neighborhoods in the larger metropolitan areas nor the suburbs offer settings and opportunities for urban public life." [30]

Communities need civic space, something that is sorely lacking in many areas of Orange County. Suburban sprawl has contributed significantly since for 40-50 years people have attempted to create their own controlled spaces within their single-family dwelling suburban properties. One writer, espousing the rise of suburbs at the expense of civic space, defined today's suburbs as little more than places "that grow lawns," and areas that are "two-thirds grass but with nowhere for kids to play ball, except in the streets." Noting that suburbs, except for streets, consist almost exclusively of private space, the writer observes that communities need parks and outdoor public spaces where people can gather and interact. [31]



Balboa Island's events sign at it's entrance imparts a sense of community to residents and visitors alike.

Towns need a public or civic center which can serve as a focus of civic life. Regional shopping malls, despite the feel that they are civic spaces, really aren't because the area they serve is diffuse and any civic function they have is incidental to their real purpose. There is plenty of public open space in south Orange County, but much of it is unusable to the general public, on land deemed unsuitable for development in the first place. As Orange County



New Irvine and Tustin City Halls provide these communities with a civic focus.

cities continue to grow, the shortage of open space that can be used for general public recreation increases.

Many of the County's newer communities lack civic centers or city halls which often exist as or are incorporated into areas of public focus in several of Orange County's older communities such as Seal Beach and Laguna Beach. Recently-incorporated cities like Dana Point, Laguna Niguel, Lake Forest and Mission Viejo have yet to build city halls, conducting business from space within office or industrial complexes. Whether plans to construct city halls are in the works, are lacking because of political sentiment against expending funds for such purposes or due to insufficient funds, the lack of civic centers, parks and meeting areas in several Orange County cities contributes to a lack of "community." Newer civic centers like those constructed in Irvine and Tustin built with attention given to serving the public, and incorporating or adjacent to other public places such as senior centers or roller rinks, are identifiable focus points of their communities. James Howard Kunstler, in an article entitled, "How to Mess Up a Town," laments suburban sprawl and the apparent devaluation of the city center in stating that, "Historically, Americans have not had a high regard for the public realm, and this is a very unfortunate thing, because the public realm is the physical manifestation of the common good. When you degrade the public realm, as we have, you degrade the common good, and hence you impair the ability of a group of people incorporated as a republic to think about the public interest. This is why we no longer possess the most fundamental notions of civic art - civic art being the effort that we make to honor and embellish the public realm in order to make civic life possible". [32]

- Create flexible building standards

Despite a common perception that the only way to tell when one

Flexibility is of key importance since the physical characteristics desired by the community can and should be achieved through a degree of and commitment to variation.

moves from one Orange County city or community into another is because the color of street signs changes, most cities in Orange County have a unique character expressed by the people who live there, the built landscape, the arrangement of streets, open spaces and "trademark" vegetation that fills the cities medians, its neighborhoods and industrial parks. Of primary importance is the architecture of the community, not only from the sense of building appearance (which initially draws the most attention), but also from its site placement, accessibility, openness, orientation, and relationship to surrounding built and unbuilt areas. These latter traits tend usually to be of tangential concern, but in the long run can have a great impact on the buildings' and immediate surrounding areas' success.

One of Orange County's largest development challenges in satisfying anticipated market demand will involve thinking ahead and planning for future continuity and identity in the landscape. It is relatively easy in the County to distinguish and identify development by decade during the last fifty years. Tract and ranch-style custom neighborhoods built in the 1950s, earth-toned no-frills facade homes of the 1960s and 1970s along with the emphasis at that time of completely enclosing large-scale public meeting places such as schools and malls. The stucco, paver and tile roof residences, and glass-walled offices of the 1980s, etc., are the common fingerprints of the county's built landscape. This distinguishability, although to a certain extent unavoidable, can sometimes result in a general lack of community cohesiveness and/or be felt in many areas where growth has occurred in rapid advances during several decades.

Cities can address this by developing planning themes and implementation mechanisms that collectively, over time, can institute a cohesive "look" for the community.

Cities looking to harmonize their community appearance should

consider starting by “establishing an identity” and then by putting plans and guidelines in place that will achieve and then maintain the vision. Such design guidelines should then be applied to as many public areas, both new and old, in the community as possible. Although they can and usually are initially perceived negatively and as constraining/limiting by citizens and businesses, such plans can and should provide for expedited processing for complying proposals. Flexibility is of key importance since the physical characteristics desired by the community can and should be achieved through a degree of and commitment to variation. If inappropriately developed and applied, design guidelines can result in creating an overly-planned appearance and thus an unappealing landscape. In fact, some communities in Orange County have been “themed” or “designed-to-death.” Their uniformity makes questionable their appeal over the long-term.

Basic considerations for design guidelines for the architectural structure and fabric of a community should be incorporated into more flexible zoning which allows for and creates incentives for proposals which integrate different but complimentary land uses and appearances. Incentives can include expedited permitting for exemplary developments in targeted areas or reduced development impact fees in infill areas where infrastructure is largely in place. Guidelines should also go beyond the appearance of the building itself, also stressing connectivity to the adjacent environment.

In cities and towns with well-defined architecture, the intrusiveness of an alien architectural form can not only be overpowering but also disruptive to the area’s identity and economic attractiveness. Local jurisdictions should provide for a limited range of physical characteristics, since it is the

small and subtle variations on architectural themes that impart a sense of identity to a street or city. Instead of mandating one specific architectural standard [except perhaps in designated historical areas or similarly valued settings], efforts should be initiated with architects, planners, and the citizenry to create a slate of designs, construction materials, colors, etc. that can be applied to both new and selected existing areas of the community.

- Consider a varied skyline as a way to emphasize areas of public importance

To a large extent, Orange County’s built skyline rarely exceeds 35 feet, a long-standing maximum height requirement specified in a number of Orange County city zoning codes for many land use types. Probably initially designated to deter high densities and to avoid becoming “urban”, height restrictions have been, in fact, a significant contributor to Orange County’s and Southern California’s sprawl. Given the fact that much of the County’s future population growth will occur in already-developed areas, planners are going to need to start thinking in more vertical terms about land use, which in the past, has been mostly of horizontal concern.



Implemented to maintain a suburban feel, height restrictions have contributed to urban sprawl.



Communities should strive for design standards that provide flexibility to avoid uniformity...

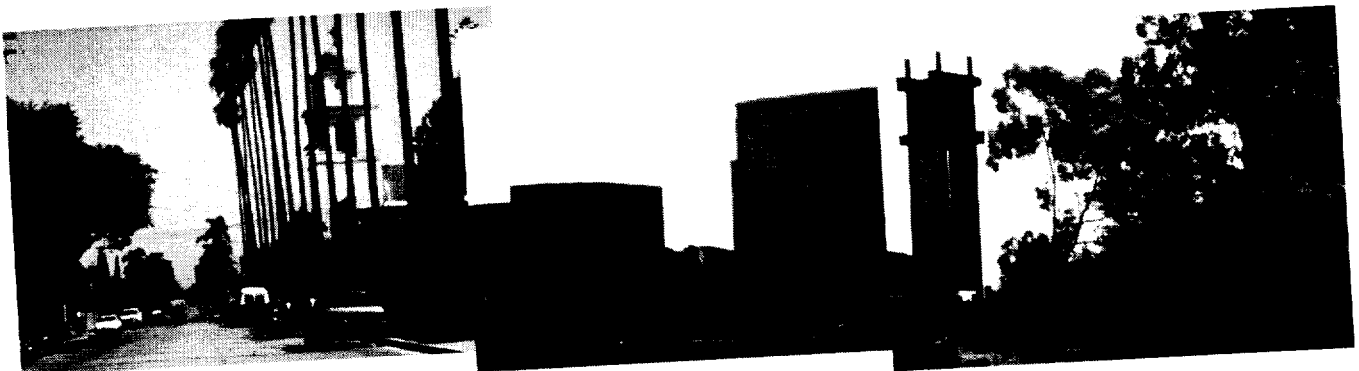
The importance of maintaining building heights that are human in scale cannot be overemphasized. However, cities should look to designate certain areas and/or types of uses where a proportionately “uneven” urban skyline can be accommodated to not only deal with increased densities but also to provide some variation to the vertical-built landscape. Perhaps focusing on allowances for added height for certain cultural/recreational and public facilities that constitute areas for public gatherings such as churches, city halls, theatres, etc., could provide a varied skyline that augments a locational civic commitment to the community.



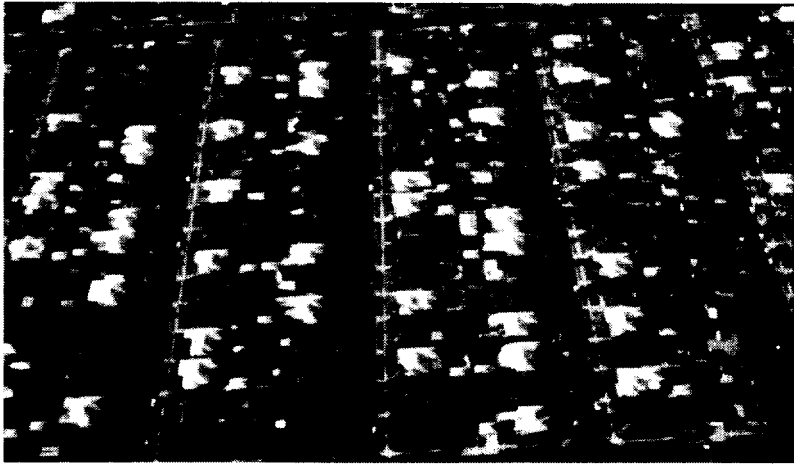
... but also avoid alien designs that can intrude on other architectural forms.

- Consider building placement and orientation as important as its use

How buildings are placed on a lot might relate to the U.S. Public Land Survey System (thought to have been suggested by Thomas Jefferson) that was proposed as a aid to parceling out the public land for sale west of Pennsylvania. [33] Since 1785, with only slight modification, the United States has used this system of survey that is based on a rectangular grid adjusted to the geographic grids consisting of parallels and meridians. The system today is commonly known as the “Township and Range”, and is still used to describe the location of property in much of Orange County. With the rise of the contemporary city, individual lots and blocks became units for buying and selling land without



A varied skyline can help identify places of importance within the community.



The influence of the U.S. Public Land Survey System (Township and Range) can be seen in much of Orange County. The system influenced street patterns and building placement on lots.

regard for historical use, physical conditions or social needs. [34] The Township and Range system of land division was conducive to the spread of the American city by facilitating the easy subdivision of outlying farmlands, resulting in a type of grid system of straight streets intersecting at right angles that typifies most urban areas in the United States. As a derivative of this system, rectangular building lots could be formed with the shortest dimension on the street side, thereby giving more lots street frontage. The system also allowed for the easy combining of individual lots into larger units (i.e., blocks) for sale purposes.

Not only did the rectangular survey system influence the street patterns of much of Orange County and the geometry of individual building lots, it also influenced the basic design and placement of a dwelling unit or structure on the property itself, resulting in boxlike structures placed squarely on a lot and usually open only to one direction, the street. These placements are supported today by zoning code setbacks, which result in the homogeneous location of structures on the lots they encompass, furthering the box-like tendencies of the urban landscape and its accompanying structures. Planners and architects should strive to incorporate flexibility in building placements, and should work to make buildings

accessible using multiple approaches to enhance pedestrian accessibility and to improve connectivity to other locations.

STRATEGY # 2: ENHANCE THE PEDESTRIAN EXPERIENCE

- Learn about and consider public space design techniques from unlikely sources

Creating attractive urban public space that can be frequented by all members of a local community is perhaps the single most important element in establishing a city's livability. Many of the principles of creating such public space are often

applied in Orange County to regional and not local attractors - shopping malls. In many ways in Orange County, the regional shopping mall has replaced public parks and facilities as the primary urban public space in local communities. Orange County's shopping areas are, in part, successful because they incorporate basic design features that are sometimes lacking in local communities; such features were of central importance in the development of public spaces in most European cities. The parallels are interesting and include the following:

- Walking is the primary means of transportation;
- Buildings are of moderately-high density wrapped around a central place;
- Streets (i.e., mall walkways) are intimate and lively, and facilitate social contact;
- The market place is identifiable by its dominance on the landscape;
- Focal points, such as fountains, act as central sitting and meeting areas for public contact;
- A variety of public events (i.e., Santa Claus, mini-concerts, mimes, etc.) takes place there in addition to the market that generates a civilized public social life.



Orange County's malls often incorporate many design features emphasized by smart growth advocates to encourage pedestrian activity.

For many Orange County and American cities, land plans have generally been drafted without strong consideration for social activities. Thus, few urban spaces have been deemed necessary to accommodate social life, markets or community festivities. Even the traditional "Main Streets" of older communities became less usable for social life in public when the use of the automobile skyrocketed. With some exceptions, the mall seems to come closest in Orange County to being public square. Now, due largely to efforts to revitalize abandoned and/or underutilized areas of cities, many Orange County communities are examining how to create an urban "heart" for their own communities within the constraints of existing development and rigid codes. While economic development may be the undercurrent driving such activities, such efforts will be unsuccessful unless some sense of community and pedestrian-orientation is achieved. The following design principles are offered for consideration as these efforts are undertaken.



- Consider establishing traffic-free zones

Successful urban areas need well-defined pedestrian and bicycle networks to safely connect people from space to space. In Orange County, malls are like

Establishing traffic-free zones (i.e. mimicking the pedestrian-orientation of shopping malls) would be a radical reversal in how Orange County approaches automobiles and pedestrians. (Left - Before, Right - After)

Factoid: A survey of suburban office workers indicated that about half left their buildings during the day. People are four times as likely to make excursions out of the office on foot in an area with mixed-use high-density development and pedestrian facilities.

Source: California Energy Commission.

mini-towns where young and elderly adults, children and the handicapped are equally accommodated without vehicular intrusion. In

boldness and courage on behalf of a city to so strongly favor the pedestrian over the automobile.

- Develop pedestrian transportation networks

Paul Friedberg, in his book Play and Interplay states: "If the city were truly to serve people...as a prime necessity it would be crossed with networks of pedestrian-oriented experiences. People would be separated from the indignities and dangers of open competition with vehicles." [36]

many of the County's cities the emphasis on moving people in automobiles *through* their communities has resulted in less, if any, attention being given to moving people on foot or by bicycle within these same areas. Planners and decisionmakers should examine and address concerns regarding the further disconnect of merchants from the shopping public when automobile transportation objectives take center stage.

In many of the County's cities the emphasis on moving people in automobiles through their communities has resulted in less, if any, attention being given to moving people on foot within these same areas.

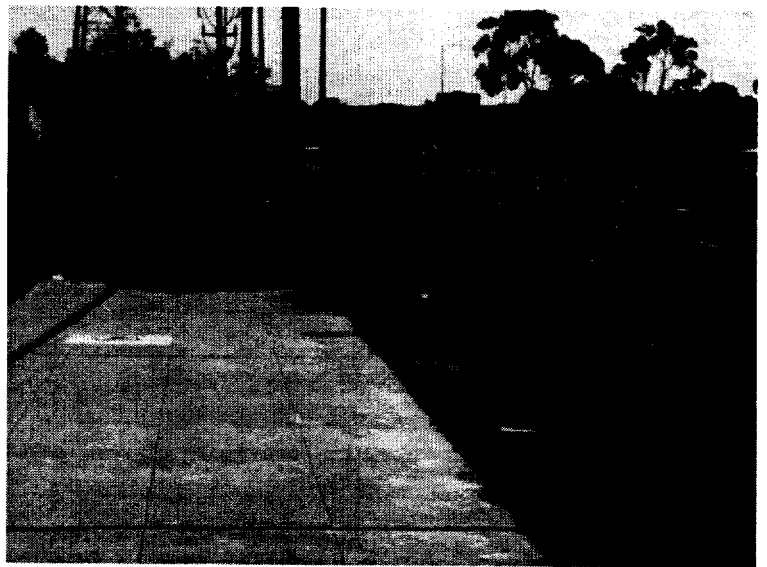
Automobile transportation improvement plans will likely expedite the movement of people along the improved arterial. But the issue of whether this should be a priority objective, ahead of potentially competing economic development objectives, might encourage some local jurisdictions to rethink their approaches and seek more balanced solutions.

Improved pedestrian access can be provided without the creation of traffic-free zones. In some cases, it can be as simple as providing sidewalks

where none exist or completing sidewalks where they end from one parcel to the next in order to connect people from one place to another. However, to really provide for pedestrians, cities should strive to give as much attention to the development

of pedestrian and bicycle networks as has been given to the automobile network. Dietrich Garbrecht, in an article regarding pedestrian planning, states that, "For walking a continuous

Providing for traffic-free zones in specified areas (i.e., mimicking the pedestrian-orientation of shopping malls) would be a radical approach for widespread application in Orange County, although in the last twenty years, hundreds of European cities have returned their main streets and squares to the pedestrians, or developed the whole of the central part of the city as a traffic-free zone with great economic success. [35] There are several areas in Orange County where such an approach could be applied, although admittedly it would take considerable



Pedestrians often face a number of obstacles getting from place to place.

network of ways must be created which would be basically similar to the continuous network of roads that exists for motorized driving. We should not think in terms of islands or oases for walking but in terms of networks as we do with respect to car driving. Areas for walking should not be distributed over space as unconnected points, islands, oases, pedestrian precincts, residential streets. Instead they should consist of interconnected footways - the threads - and foci or nodes - the knots." [37]

Lewis Mumford surmised that planners for the future might best heed examples implemented in the past, highlighting the City of Venice, Italy as a model for accommodating various transportation modes and paces. He states that, "Medieval Venice brilliantly anticipated the best inventions of twentieth century planning. The present separation of fast moving bulky boat traffic on the Grand Canal from slower moving traffic on the network of minor canals, along with the network of foot ways was a magnificent innovation... The flouting of this rational principle of design by 'progressive' engineers has brought disorder and ruin to cities." [38]

Absent the wherewithal to create traffic-free zones, and given the practical difficulty to completely replan/rebuild existing urban areas in Orange County, architects, planners and decisionmakers can still work with the existing urban template to enhance such areas for the pedestrian. Some ideas for accomplishing this include the following:

- Emphasize a multi-modal transportation system which places equal value on the pedestrian and bicyclist as it does the automobile, and ensure that the land uses themselves support the system: Plans that look to comprehensively address the total range of transportation modes and options can begin to address many concepts that are not conducive to transit-oriented design, such as:

Factoid: No jurisdiction in Orange County has a planned city-wide pedestrian network that strives to provide foot traffic thoroughfares that are independent - and more than a tangential afterthought - of main arteries.

- Existing land use patterns that discourage walking, cycling and transit use;

- Land uses that are often separated from one another to the point that employees have no choice but to drive to eat lunch or complete errands;

- High-density residential developments that are often isolated from commercial activities;

- Piecemeal development of parcels that does not accommodate pedestrians, who are often confronted with walls, parking lots, and a general lack of clearly-marked pedestrian routes. [39]

- Develop transit- and pedestrian-oriented guidelines for application to specified areas:

- Amend planning documents to provide for greater flexibility to mix land use, and to provide materials regarding successful mixed-use development to project applicants in designated areas. Include incentives, such as density bonuses or reductions in parking, for mixed-use development proposals;

- Zone for ground-level retail/office at new multi-story office and residential neighborhoods;

- Encourage residential development in existing employment areas, except where health, safety, and nuisance concerns exist;

- Encourage new and expanding office and industrial development to include commercial uses such as restaurants, banking, cleaners, etc. to reduce mid-day automobile trips.

- Encourage home-based work and encourage developers to equip new residential buildings with appropriate infrastructure to accommodate technology.

Local governments need to re-seize control of their general plans, using their plans and complimentary zoning codes, and specific plans to set the stage for orderly rather than piece-meal development to



Newer buildings with ground-level retail and upper-level residential uses.

of special importance in towns as special places. The signs and/or designations will not by themselves create a pedestrian-friendly place, but can set the initial boundaries for an area deemed to be of importance, and can lead to or compliment the implementation of many of the following ideas.

- Fashion usable, inviting public spaces by paying attention to details

Local jurisdictions should pay considerable attention to the “floor” of their cities, literally from the ground up. Cities

occur. This concept is discussed later in this report.

- Create special districts (art and entertainment/historic shopping districts) which can create a vibrant downtown

People like to be in places that are “places.” Developers in Orange County and beyond have known this for years and have endeavored to assign names to planned communities and developments to convey a sense of place and community. Cities can do the same thing, with minimal investment in signage and monumentation, by designating areas

should strive to ensure that pedestrian areas are not only provided for and are interconnected and maintained, but that they also provide visual stimulation and practicality as well. Gordon Cullen discusses this concept and states that “The furniture (of a city) includes floorscape, posts, canopies, enclaves, focal points, and enclosures. The amount of possession may be small, yet its perpetuation in the furniture gives the town humanity and intricacy in just the same way that louvers on windows give texture and scale to a building when the sun is not shining.” [40]

In addition to zoning, which provides for a mix of



Signage and monumentation can help enhance/create community identity.



Passive land uses, such as urban pocket parks, enhance the pedestrian experience.

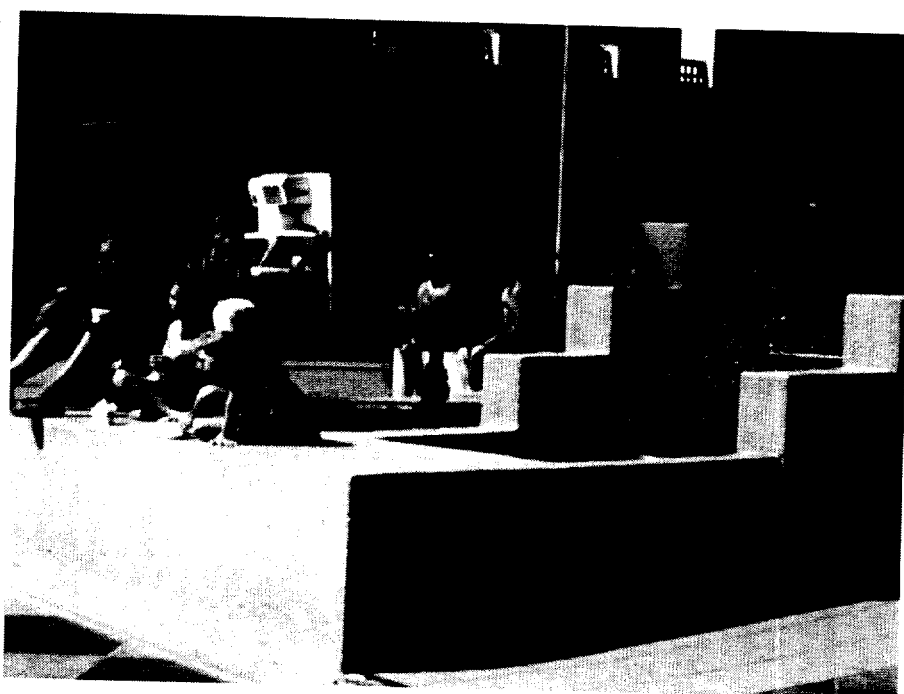
than uniform surfaces, they can also be used for traffic “taming” or “calming” in areas where automobiles are allowed, but are desired to move at reduced speeds.

- Emphasize seating in planning public spaces

Seating is a basic requirement of any good urban space. Yet, few planned public seating areas exist, with the possible exception of some parks, in Orange County. Cities should strive to incorporate seating into pedestrian-oriented areas and plans, and also to recognize that not everyone needs or would choose the same kind of seating.

William Whyte, in writing on small urban spaces, states that: “Seating is too frequently ill conceived and not supportive of good social life. Insufficient seating reflects the donor’s grudging tolerance of

land use, planners must also incorporate a range of activities/experiences than can engage the pedestrian. Decorative and varied sidewalk and street colors and textures are not only intrinsically more intriguing



Fountains and public art can also serve the pedestrian.

the 'nonproductive' activity of social life; benches set in a row demonstrate a lack of understanding of the human need for conversation and sociability." [41]

Public seating areas should be a planned component of urban areas to support and enhance the pedestrian experience. A variety of sitting places should be included to accommodate young and old alike. Special attention should be paid to designing a maximum variety of types of seating and for areas that aren't specifically designed for seating, such as planters, railings, walls, steps, fountains and ledges to provide additional seating opportunities. Fountains should be incorporated into pedestrian enhancement plans because they provide additional areas for the pedestrian to meet, rest, and enjoy the environment. Public art can serve the same purpose and can be designed to be interactive by being accessible, touchable, climbed on and manipulated. Art can be used to recall events that used to take place at that location, refer to the purpose of a building, reflect cultural heritage and/or local traditions. [42]

- Pay attention to landscaping in public spaces as a critical component of the pedestrian experience

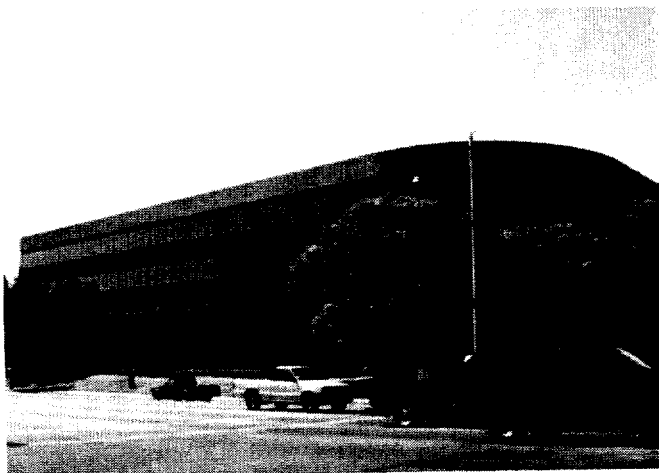
Trees encourage people to linger in public by providing physical comforts [shade and shelter] and

soften the harshness of the city. Often overlooked is the fact that trees can be a relatively inexpensive way of hiding questionable architecture. Providing nature in the city is also symbolic that city leaders pay attention to or respect the environment. [43] Trees, plants and lawns are natural ways to mitigate the urban heat island effect and are proven ways, in conjunction with the selection of building materials, of reducing energy consumption as well.

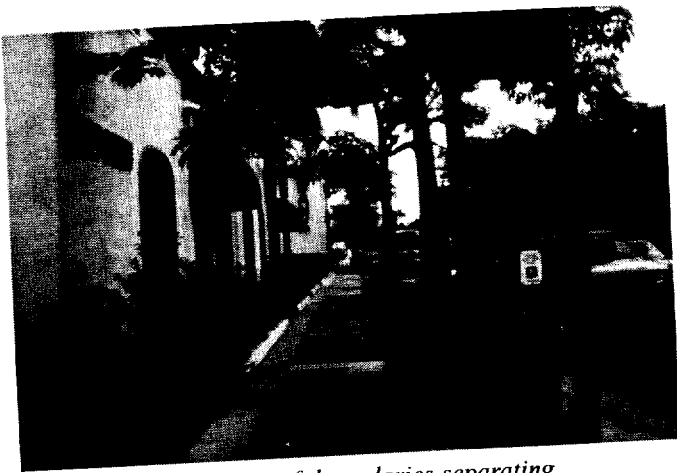
Trees also serve to visually narrow streets, creating a perceptual traffic calming mechanism. The types of plants used in urban locations can have security benefits, with thorny bushes, in some instances, acting as a deterrent to potential intruders, comparable to what walls or excessive lighting might. Planters can be designed to divert pedestrian traffic or to create natural barriers in areas where sidewalks abut busy highways.

- Turn down the lights

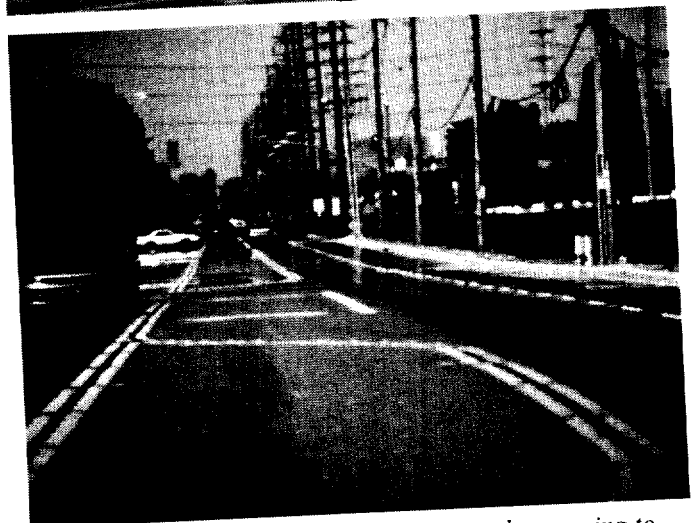
Lighting is a necessary component of a safe urban landscape, but many suburban and city areas are over-illuminated to the point of garishness. Sodium-vapor street lamps and overlit parking lots intrude on the evening sky, are not conducive to the pleasantness of the night, and may not be necessary in areas where crime is not a big issue. Planners should revisit their lighting standards or create standards where none exist with an objective,



Trees and vegetation soften the urban landscape, reduce heat and energy consumption and help to hide questionable architecture.



Vegetation can create soft boundaries separating automobiles from pedestrian areas.



(top) Trees can visually "narrow" streets, thus serving to reduce traffic speeds.

(bottom) Lack of vegetation/trees tends to create traffic "runways."

defining adequate illumination needs.

STRATEGY #3: PLAN FOR TRANSIT-ORIENTED DEVELOPMENT AND BALANCED TRANSPORTATION OPPORTUNITIES

The connection among development patterns, transportation, and air quality continues to receive increased attention among planners and decisionmakers who are grappling with how to serve new residents and businesses while meeting air quality mandates and transportation goals. Notwithstanding that the air quality benefits associated with the implementation of livable or smart communities concepts may be overstated [44], there is little debate about the fact that the automobile-oriented patterns of the past 50 years have contributed to the need to drive more and farther. While Americans averaged 4,485 automobile-miles per person in 1970, this number increased to 6,330 miles per person in 1993, a 41 percent increase. In some southern California communities such as Riverside, the average annual vehicle miles traveled per household exceeds 23,000. [45]

By 2020, Orange Countians will drive nearly 85 million miles daily, averaging more than thirty minutes to cover a distance of 13 miles. [46] The Orange County Transportation Authority assumes that mode choices that people will make 20 years

from now to get to work will differ little from the choices they make now, even with \$15.7 billion more dollars invested in the county's transportation system, much of which will be allocated towards transit. [47] Studies showing that the residents of urban areas tend to use transit at much higher rates than people who live in suburban and rural areas. It is peculiar that the mode split for Orange Countians is projected to remain similar to what currently exists, even though density will increase significantly in several areas. Although OCTA's bus system is among the fastest-growing in the nation, these projections indicate that such transit growth is and will continue to primarily serve an existing and growing transit-dependent population. As such, the bus system's contribution to overall congestion relief may be

negligible. Simply adding bus routes and buying more buses, while needed to serve those who are transit-dependent, will singularly do little, if anything, to improve congestion.

Proponents of neo-traditional, transit-oriented design believe that the siting and mix of land use is key to reducing dependence on the automobile. They argue that planners and decisionmakers pay too much attention to evaluating how a proposed land use can accommodate the automobile (i.e., traffic studies, road widening, parking space requirements, etc.). Instead, planners should more closely examine how proposed projects can link with the full range of transportation modes, including those that are transit, bicycle, and pedestrian-oriented. This will require considerable shifts in local planning philosophies. [48]

Notwithstanding the considerable variables that work together to make a community livable, it is clear that increasing levels of frustration accompany each approval of a development proposal. Arguments for property rights often win out over those against specific development proposals. Resulting approvals are usually more of a compromise than anything else. Win or lose, developers and local advocates, alike, are increasingly paying in the form of lost time and piece-meal, ad hoc solutions that fail to satisfy any group or address long-term issues.

Recognizing the need to accommodate the significant increases in population that are forecasted for Orange County and Southern California, traditional opponents to growth should realize that smart growth applications might actually serve as a catalyst that can result in decreased congestion,

improved local economies, provision of a variety of housing choice, acquisition of community identity, and on overall improved quality of life. Froelich indicates that, "Smart growth shifts the terms of the debate away from the pro-and anti-growth context of the past. It seeks growth, recognizing the crucial role that development plays in maintaining and improving communities." [49] A number of strategies exist for improving the land use-transit connection.

The following approaches address major objectives of:

- Planning land use patterns that encourage people to increasingly walk, bicycle or use public transit for a portion of their daily trips;

- Developing areas in a more compact manner or form to minimize vehicle miles traveled and improve the effectiveness of transit alternatives to

the automobile;

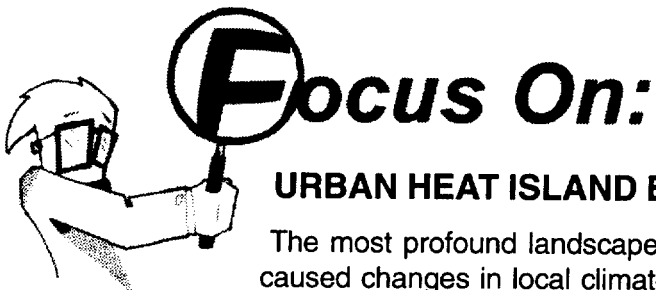
- Promoting project site designs that encourage alternatives to the automobile.

- Adopt a planning - not processing - approach to land use proposals by revisiting general plans to ensure prioritization and coordination of land use policies and transportation plans that provide for and improve opportunities for non-automobile travel

Too often planners and decisionmakers base land use decisions on whether proposals conform with existing codes instead of whether they result in the best use of space. This makes local jurisdictional planning staff more "processing" than "planning" oriented,

Proponents of neo-traditional, transit-oriented design believe that the siting and mix of land use is key to reducing dependence on the automobile. They argue that planners and decision makers pay too much attention to evaluating how a proposed land use can accommodate the automobile.

"Smart growth shifts the terms of the debate away from the pro-and anti-growth context of the past. It seeks growth, recognizing the crucial role that development plays in maintaining and improving communities."



URBAN HEAT ISLAND EFFECT:

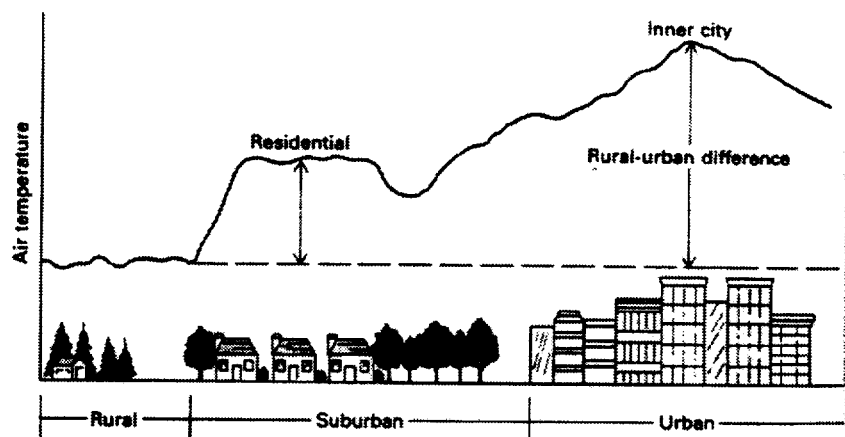
The most profound landscape modifications created by humans, urbanization, has also caused changes in local climates above and adjacent to cities. A general comparison of urban and rural areas shows that cities not only experience significantly decreased relative humidity and windspeed, but noticeably increased precipitation totals, thunderstorm frequency, cloudiness, fog, haze, particulate matter, pollution and temperature.

An interesting aspect of human-induced climatic modification in cities is the urban heat island effect, temperature fluctuations which exist consistently in urban areas during winter and summer months. These fluctuations vary from a fraction of a degree to as much as 15 degrees Fahrenheit. Central business districts, with their more massive buildings and sparser greenery, show the greatest temperature differential, but suburban areas clearly demonstrate the effect.

The existence of the urban heat island can be linked to the following causative factors:

- The rock-like materials from which the city is made which have large thermal capacities (ability to store heat) and create impervious surfaces that lead to the rapid removal of precipitation;
- Heat generated by artificial sources such as industry, motor vehicles and domestic heating. Such additional heating is conducive to chemical reactions that cause certain pollutants, which inhibits the loss of upward-directed radiation from the surface.
- Tall buildings of cities that create a three-dimensional structure that alters the flow of air and creates a complex geometry for heat exchange.

Cities can, to a certain extent, offset the urban heat island through tree programs and extensive landscaping, which can help to mitigate the city/rural climatic variations described, soften the urban appearance, increase property values, improve air quality (depending on the types of trees planted) and reduce electrical power consumption.



Sources:

- McKnight, Tom L. *Essentials of Physical Geography*. New Jersey: Prentice Hall, 1992, p. 65;
- Lutgens, Frederick K. and Tarbuck, Edward J. *The Atmosphere*. New Jersey: Prentice Hall, Inc., 1979, pp. 272-282;
- Woolum, Clarence A. "Notes From a Study of the Microclimatology of the Washington, D.C. Area for the Winter and Spring Seasons," *Weatherwise*, XVII, no. 6, 1984, pp. 264-267;
- Quattrochi, Dale. "Cooling Hot Cities with Trees," *The Futurist*, May, 1998.

and their tools, sometimes outdated general plans and zoning codes, are both of little practical use in making determinations on how a community should best develop, and are silent with regard to how social, fiscal, and environmental interrelationships of project proposals should be considered. Recently, an Orange County jurisdiction's planning commission unanimously approved a large-scale industrial project, despite strong concerns and community opposition. In approving the project, commissioners indicated that, in sum, the proposal simply met the existing codes.

The ingredients for suburban sprawl are virtually built-into outdated zoning codes and related planning documents. It benefits further from existing "path of least resistance" institutional structures. Alder states that, "For (neo-traditional) villages to become a reality, they will have to get past a phalanx of planning boards and bank officers, whose first principal is 'Nobody ever lost his job for following the code.'" [50] Local jurisdictions are also hamstrung by an array of forces beyond their control, namely federal and state budget cuts, global economic trends, unfunded mandates, and actions by neighboring municipalities. These variables make it extremely difficult to plan anything from a purely objective, comprehensive, "do what's best for the area" perspective. Project proponents, almost by default then, are left to determine how creative they want to be in their land use proposals, which invariably will often remain somewhat limited, mindful of market trends, bank financing and the desire to craft projects that fit existing codes and ordinances to expedite project approvals.

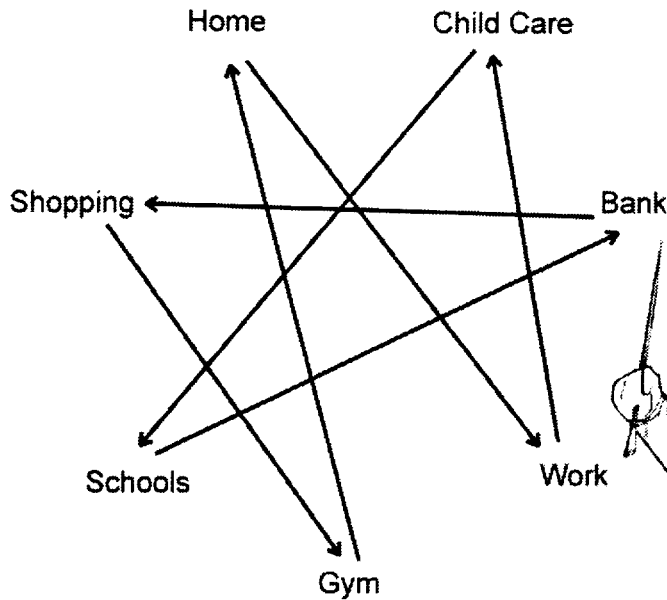
Given these limitations, local jurisdictions should strive to ensure that uses proposed in general plans (updates and amendments) can, to the extent possible, be supported by multi-modal transportation systems and approaches that the land uses themselves support. General plans should identify the areas which are best suited to development in terms of existing and planned transportation efficiency and mode variations, and incentives should be provided for development in these areas. Smart growth shifts

the terms of the debate away from the pro-and antigrowth context of the past. It seeks growth, recognizing the crucial role that development plays in maintaining and improving communities.

As discussed, homogeneity is the essence of the suburbs, encouraged and supported by zoning that encourages separation of land use. The earliest modern application of land use zoning power in this country occurred in 1867 in San Francisco as a way to physically separate and isolate dangerous, odoriferous, and unsightly practices. Thus the legal separation and isolation of land uses began, creating the foundation for current zoning practices. [51] The initial separation of land uses in most early zoning was not absolute, but was more "pyramidal" in approach. That is, the codes began to promote a hierarchy of exclusion of uses, from industry (the least exclusive) to residential (the most exclusive). Residences were permitted anywhere with business and commerce permitted in all but residential zones. In 1909, Los Angeles instituted the first major land use controls in the country, influencing large areas of undeveloped land. These controls created a multitude of different types of zones, providing the framework for now-familiar zoning jargon of "single-family," "multi-family," "light industrial" and "heavy industrial," definitions designed to protect the social sensitivities and land values of the new, auto-oriented suburbanites. [52]

One description of the resulting suburban existence is of "a la carte cities", where although no single locality offers a full set of community services, an enormous range of possibilities is available within an acceptable car trip's distance. Karl Zinsmeister observes the suburban lifestyle and states, "You pick your mall, your office park, your residential street, your child's daycare and school. There are secondary choices of exercise club, video store, medical clinic, car repair station, and favorite ethnic restaurants. You assemble all these into a daily travel package, and that is your community." [53]

Realistically, providing a mix of land use won't replace this sort of highly personalized "community",



mid-day trips; and

- encouraging neighborhood retail and service uses within walking distance of residential areas and look to incorporate them into the fabric, rather than the fringe, of such developments.



Several studies indicate that higher density and mixed-use developments located within walking distance of transit stations result in higher levels of transit use. [54] Given this premise and considering that certain levels of ridership are needed for transit districts to provide high levels of service, transit agencies are increasingly becoming interested in working with local jurisdictions to locate transit stops/stations in or near areas planned for high density development.

"A la carte" cities provide a range of services within an acceptable car trip's distance.

but it can result in reducing vehicle miles traveled, some vehicle trips, and thus congestion if some of these uses aren't so segregated from each other. Zoning for mixed use development, especially near transit stations and urban and suburban centers, is perhaps the main goal of all transit-oriented development strategies as an alternative to typical suburban growth patterns. Transit-oriented design simply incorporates more of an orientation to transit and pedestrian travel by clustering retail services and other appropriate uses in a "town center" location, providing a range of housing densities and styles.

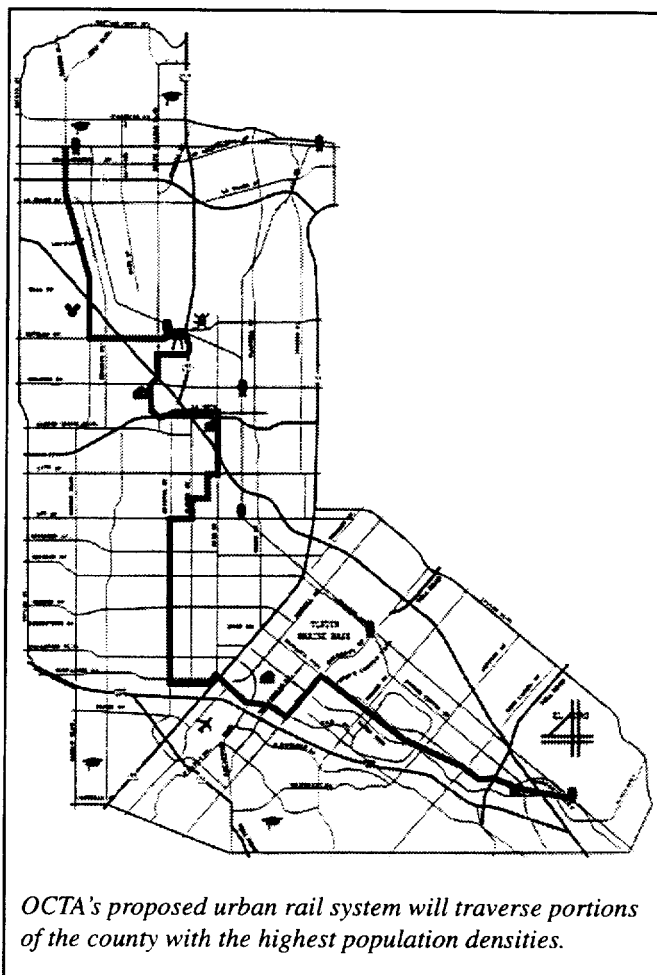
In revisiting zoning codes and enabling ordinances, planners can pursue a variety of options for achieving a better land use mix including:

- zoning for ground-level retail/office at new multi-story office and residential developments;
- integrating housing into existing and planned commercial developments by encouraging residential units adjacent to or above shops and offices;
- encouraging new/expanding single-use development, such as offices, to include other uses such as restaurants, banking, etc., which can reduce

OCTA has recently approved \$1.5 million for working with seven local jurisdictions that will be affected by a proposed urban rail system through central Orange County. The strong linkages between density and transit ridership are in the interest of developing a successful urban rail system with densities along its path, and particularly around proposed stops, that are higher than what typical suburban development patterns provide. This effort provides a significant opportunity for these seven cities to initiate changes to

Factoid: According to one study, about 70 % of U.S. residents will routinely walk about 500 feet, and 40% will willingly walk ¼ mile on a regular basis. Local jurisdictions should consider such thresholds and provide for designs that avoid the appearance of "long stretches" between destinations, since they can be deterrents to pedestrian traffic. Such concepts are employed in the design of shopping malls where angles and turns make it difficult for the shopper to equate long, direct-line distances between one shop and another.

Source: California Environmental Protection Agency, Air Resources Board, "The Land Use - Air Quality Linkage: How Land Use and Transportation Affect Air Quality", 1997, p. 3.



existing zoning and planning guidance documents in a manner that can incorporate transit-oriented concepts.

• Reconsider Parking Requirements and Design

It is not uncommon for more surface area of an office or commercial development to be devoted to parking than to the buildings themselves. While critical for reassuring prospective tenants that parking for client cars is available, parking can often discourage pedestrian circulation by creating barriers to movement and increasing the distance between destinations. For years, planners have applied standard formulas that determine the number of parking spaces required for certain land use, often ignoring real-world factors that may allow opportunities for significantly reducing the number of parking spaces needed at certain locations. Recent studies indicate parking requirements are almost

always based on national average requirements, requirements in neighboring cities or guesswork, rather than measurements of parking demand. [55] As a result, requirements often exceed demand. While jurisdictions could commit resources to measuring parking demand differently to better match demand and supply, the thought of reduced parking requirements is often feared by nearby property owners/tenants who fear spillover parking. But parking is expensive, costing developers from \$10,000 per space on a surface lot to \$30,000 per space in a parking structure. Money spent on parking reduces dollars potentially available for other project amenities. [56]

Following are a few suggestions that local jurisdictions might consider with regard to future approaches to community parking:

- Use pre-established parking formula requirements as guidelines only and make determinations of required spaces based on site characteristics, adjacent use and need: Local jurisdictions should look toward reducing requirements for areas with a transit focus, allowing/encouraging shared parking arrangements where uses have different hours of operation. Jurisdictions should modify zoning ordinances to provide for reduced parking in established “pedestrian-oriented” zones and near transit centers. Reduced requirements should also be considered for new residential housing reserved for transit-dependent populations such as the elderly, low-income, etc., in areas that are or will be well served by transit;
- Encourage parking designs that enhance the pedestrian environment: Parking lot design and location can have a strong negative impact on the pedestrian by presenting barriers and obstacles to pedestrian destinations. Standard planning practices often call for parking lots to be situated between sidewalks and buildings, often creating an obstacle and safety hazard for those on foot. Berms, planters, and fences on the edges of lots adjacent to sidewalks further separate pedestrians from buildings. The impact of off-street parking can be

addressed in a number of ways, the foremost of which is to lessen the overall amount of parking area allocated to a site. This can be accomplished by 1) reducing needed spaces, 2) allowing on-street parking, which is encouraged by some as a way to provide a buffer between pedestrians and traffic, [57] 3) requiring above-ground parking structures, and 4) requiring sub-terranean parking, where feasible. Although the most expensive

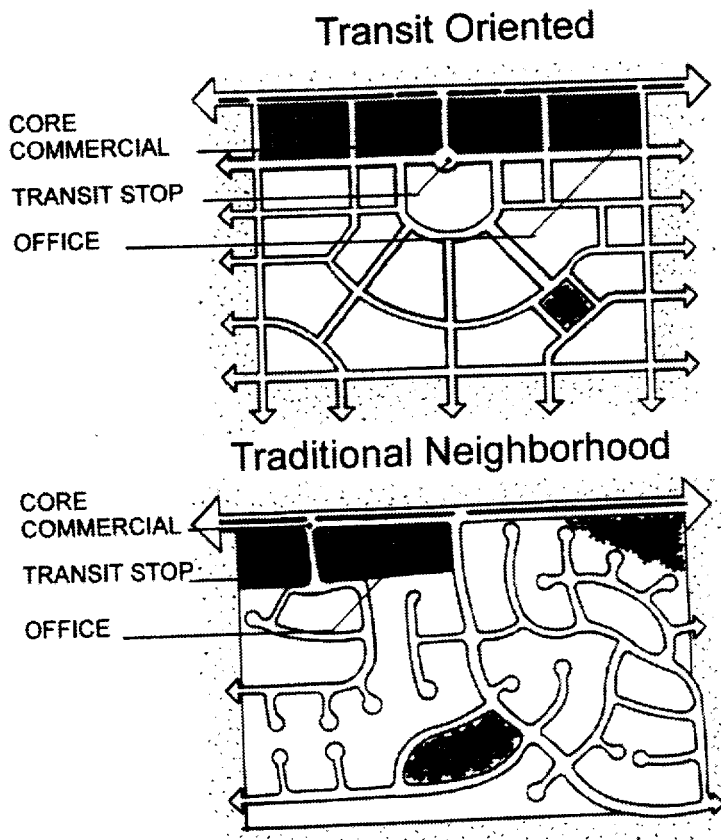
option, sub-terranean parking is the best option in terms of enhancing the pedestrian environment and dedicating surface space to other more desirable uses. Parking lot design features can be utilized to reduce the visual impact of off-street parking, as well.

Focus On:

TRANSIT-ORIENTED DESIGN

The typical street circulation pattern in many suburban areas has consisted of a hierarchy of local streets leading to collector streets and then to major arterials that interconnect sections of a community to each other and to freeways. Major collector and arterial streets, which often provide the only through connections between different sections of suburban communities, tend to be quite wide to allow vehicles

to travel faster. The typical suburban circulation pattern limits the number of available routes between trip origin and destination points, placing many vehicles on major streets and at signaled intersections. Major thoroughfares are significant barriers to walking and bicycling and tend to encourage driving, even for short trips.



Interconnected street patterns provide multiple routes to travelers and reduce travel distances. Commonly found in older neighborhoods, downtowns, and small communities, interconnected street networks provide numerous route choices instead of focusing traffic into several wide arterials; they offer more direct routes for pedestrians and bicyclists as well as cars; and they can help to slow vehicle speeds. Even though vehicles travel at slower speeds, travel times can be similar to those in suburban areas with fast-moving arterials because of shorter distances and more direct routes. Interconnected street networks can reduce average trip lengths and vehicle miles of travel by 10 to 15 percent, compared to standard hierarchical street patterns.

Source: California Environmental Protection Agency, Air Resources Board, "The Land Use - Air Quality Linkage: How Land Use and Transportation Affect Air Quality," Final Draft, 1997 Edition.



Multi-level parking structures reduce the amount of land used for accomodating the automobile, freeing space for other area amenities.

of local governments in recent years, and billions will be spent in the future to continue to move cars from one spot to the next. However, and as previously discussed, our region's focus and dependence on the automobile has come at the expense other modes of transportation, primarily the pedestrian, and has spawned the continuing sprawl of land use.

The idea of "traffic-calming" is gaining attention as a way to enhance the pedestrian environment, improve safety, deter "pass-through" traffic, and promote economic development incertain areas. Traffic calming is basically a method for designing or redesigning streets

• Implement Street Design and Traffic Calming Mechanisms

Southern California's and Orange County's growth historically and still has as a top priority the accommodation of the automobile. The ability to move people, primarily in their automobiles along arterial highways, has been a top spending objective

to reduce traffic speeds and/or volumes. As a secondary impact, these techniques tend to improve the pedestrian environment. A less severe control method than an outright ban on automobiles in certain urban areas, traffic calming or "taming" usually employs a range of techniques which can reduce vehicle speeds, making areas safer for residents, pedestrians, and children. Typical traffic calming



The City of Orange's circle is both a community focus point and a traffic calming mechanism.



Although open to vehicular traffic, this area's use of planters and brick pavers de-emphasizes the automobile.

measures include the following:

- **Narrow streets:** Wide, "over-engineered" streets encourage speeding, waste public resources, and discourage and endanger pedestrians. [58] Working with public works departments and public safety providers, planners, and developers can work to reduce street widths and increase space for pedestrian and bicycle traffic. Such actions can reduce speeding, accidents and crime. [59]
- **Create distinguished pedestrian crossings:** Sidewalk "flares" or "bulbs" not only reduce crossing distances for pedestrians, but also can help to reduce traffic speed, thus increasing safety. [60] Roughening and raising pedestrian surfaces across highways conveys a visual message regarding the importance of the pedestrian and practically can serve as a sort of speed bump to automobile traffic.
- **Build traffic islands and roundabouts:** These mechanisms calm traffic by visually narrowing arterials and can also be used to soften the landscape with vegetation. The Orange Circle in the City of

Orange not only provides a focal point for the downtown, but also serves to slow traffic approaching from Chapman Avenue and Glassell Street. The Circle's mini-park, with fountains and benches, attracts pedestrians as well. Carmel, California, has an extensive system of natural traffic calming which evolved largely as a result of that City's interest in preserving nature. While laid out in a grid pattern, Carmel's streets often wind around cypress and Monterey pine trees or divide to accommodate a tree in the center of a road.

- **Make the bus system appeal to automobile commuters**

Orange County's investment in its bus system is huge. Operating and maintaining the fleet of the Orange County Transportation Authority's buses costs approximately \$93 million annually. OCTA's Fast Forward Report projects a future investment in the bus system of more than \$3.8 billion to provide increased bus service to 1.97 million annual vehicle service hours by 2020. [61] As mentioned earlier, however, it may be that the County's bus system and plans for expansion, while meeting needs of an increasing transit-dependent population, will continue to be of little appeal to motorists as a practical alternative to the automobile.

OCTA continues to address this issue, conducting regular ridership surveys to obtain trip origin and destination data and other bus ridership variables. These data allow the agency to initiate changes in bus and rail service planning in an effort to improve the transit system in its challenge to develop approaches that can improve service to discretionary commuters as well as to those who are transit-dependent.

In addition to continuing efforts to finetune existing

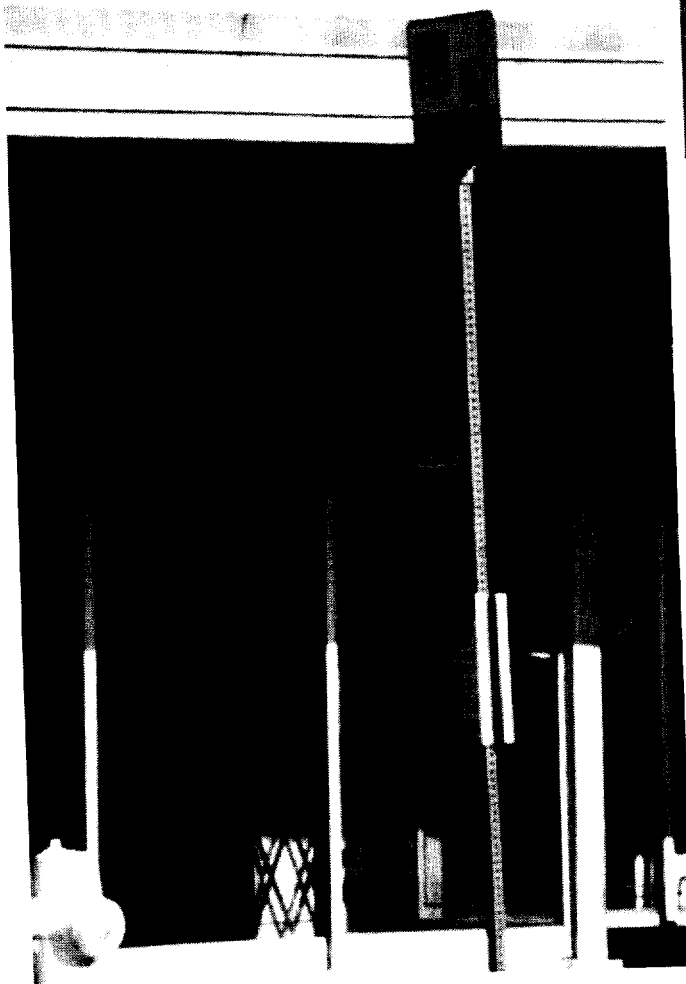
bus transit system operations, one other potential way to make the bus a more attractive transportation alternative to the discretionary commuter is to improve the appearance and appeal of the bus stop. There are approximately 6,500 bus stops in Orange County, the majority of which consist of little more than an OCTA sign posted where the stop is to be made. Many are void of any amenities whatsoever, lacking benches, trash receptacles, shelters, etc. As discussed by one speaker at a regionwide conference on livable communities, the relative dearth of amenities at bus stops afforded to those who use the bus system are such that the signs demarking the stops might as well read, "Losers stand here." [62]



The "airquarium" bus stop is built more for vandal-resistance than comfort.



This nicely-shaded bus stop also provides seating that faces away from the arterial highway.



Most bus stops lack any amenities for commuters.

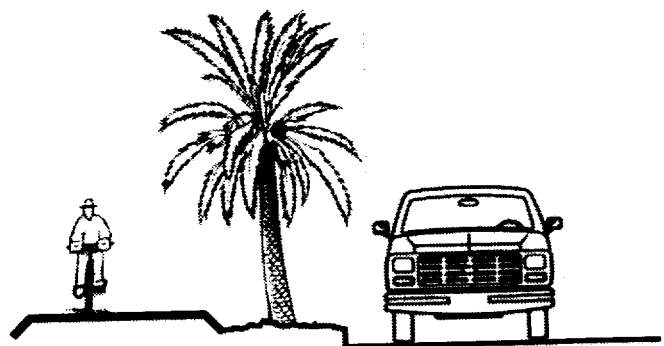
Bus stops serve as the "front door" to Orange County's transit system. The initial image of the bus system, gained from viewing the majority of stops alone, is quite predictable. Stops that are devoid of comfortable areas to sit are in many cases inches from and oriented toward busy streets, are shelterless, and do little to beckon to any others than those who are forced to use the bus system. As one bus rider stated, "The only reason I take the bus is so that I can earn enough money so that I can buy a car so that I don't have to take the bus."

OCTA's responsibility in this arena is solely to provide bus stop signage. It is within the purview

of local jurisdictions whether facilities are enhanced, assuming that funds are available. Cities and service providers should jointly develop and implement programs that can enhance the overall attractiveness of bus stops, especially those that are close to transit stations and areas deemed by local jurisdictions to be of importance to the pedestrian. Local jurisdictions and/or major retailers should also work with service providers to allow for localized turnouts into major retail centers and other related areas to bring people closer to their destinations.

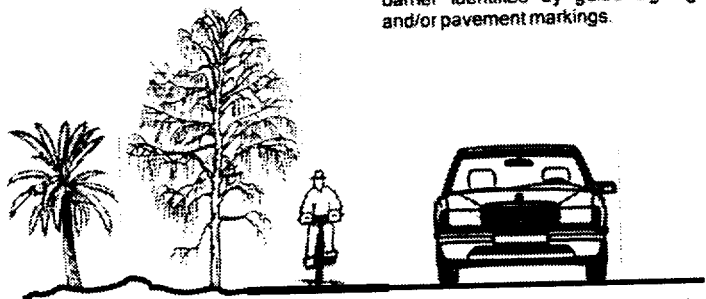
- Emphasize the development of a commuter bicycle system

Bicycling in Orange County accounts for a very small portion of total transportation trips. In Orange County, bicycle trips currently make up less than one percent of the total work trips; by 2020, the goal is a modest 1% of total work trips. [63] Given that only \$32 million of the \$15.7 billion (0.2%) allocated for meeting Orange County's future transportation needs is for bicycle and/or pedestrian improvements, it is clear that not much emphasis is being given to this mode of transportation. However, reports that show a correlation between the number of bike lane miles and increases in non-recreational bicycling [64] appear to indicate that a greater investment in this mode could pay off in the form of increased bicycle commuting trips and fewer vehicle trips. Cities, especially those that are located in locations lacking significant topography, should work to identify and correct gaps and obstacles in current and planned bicycling routes. Orange County already has a Commuter Bikeways Strategic Plan with a general goal to construct bicycle facilities on all arterial streets included in the Master Plan of Arterial Highways, where feasible. [65] The Plan contains two main components: 1) a bicycle facilities implementation plan, and 2) a strategy for improving bicycle amenities in Orange County. Those jurisdictions which are looking to improve the status of their bicycle paths should refer to this document and look to incorporating its ideas as appropriate



**Class I
Bike Path**

A 10' - 12' pathway completely separated from motor vehicle facilities by space or by a physical barrier identified by guide signing and/or pavement markings.



**Class II
Bike Lane**

A 5' - 8' lane located on the edge of a road identified by BIKE LANE / BIKE ROUTE signing, special lines, or pavement markings.

Class I paths that are separated from the automobile prioritize bicycle and pedestrian traffic compared to other options which share or are immediately adjacent to roadways, such as Class II Bike Lanes.

into general plans, zoning, specific plans, and ordinances.

A frequently-cited obstacle in the use of a non-recreational bike system is safety. [66] This barrier can be addressed, in part, by creating a dependable, well-designed bike route network for commuters which makes the development of Class 1 bikepaths, where possible, a priority. [67] OCTA's Strategic Plan provides a number of recommendations for bike path implementation; however, it is the responsibility of local jurisdictions to implement them. Bicycle amenities at the worksite [e.g., showers, lockers, storage] are also frequently cited needs, and should be considered by local jurisdictions as they enhance alternatives to the automobile.

STRATEGY # 4: RE-EXAMINE REGIONAL POLICIES

- Consider how growth and transportation policies might change or reinforce commuter behavior

OCTA's FastForward Plan allocates over 59% (\$9.2 billion) of the Plan's proposed \$15.7 billion in available revenues to freeway, tollroad, streets, and road improvements. \$3.8 billion (24%) is allocated to bus transit, much of which will go towards continuing and expanding bus service. \$2.5 billion of the Plan's cost is focused on rail transit, but only 36% of the funding for such projects is anticipated from what are normally considered to be traditional and reliable funding sources such as gas, sales tax and other formula revenues. In contrast, 69% of the Plan's \$13.1 billion in road and bus system improvements are anticipated to be funded from these revenue sources. Remaining revenues to complete the above projects are anticipated to come from a less reliable and unknown combination of tolls, city funds, developer fees, and new revenues. According to the Plan, 80% of the cost of the proposed 28-mile urban rail system will be funded from these private/other revenue sources. [68]

These figures indicate that Orange County will continue to allocate a significant majority of future transportation improvement dollars to road improvements and bus system maintenance over other alternatives, an approach that is consistent with the FastForward Plan's expectation that commuter behavior will change little during the next 20 years. FastForward assumes that commuter work trip travel choice will change minimally in the future. The greatest increases in non-auto travel will not come from shifts in mode use, but from workers who will telecommute and/or work from home.

It is difficult to gauge the point at which people will no longer tolerate making long automobile commutes; however, it seems

clear that future countywide and regional transportation plans are geared towards accommodating existing commuter behavior into the future. In essence, Orange County, despite its evolution into an urban center continues a pattern of transportation planning that is supportive of maintaining suburban levels of service and commuter behavior. This creates an interesting situation for transit planners and providers given that road and transit improvements are mutually exclusive to the commuter. Maintaining automobile travel times at or near "acceptable" levels reinforces automobile commuter behavior and keeps people in their cars. As long as this approach continues, non-automobile transit ridership will suffer as a less desired or unknown alternative.

The region's growth projections drive the transportation planning process. In Southern California, the distribution of growth costs taxpayers billions transportation dollars to keep up with the pace and location of growth. Continued imbalances in projected job growth in Orange County and housing availability and affordability in the Inland Empire will require significant public investment in the transportation system to move workers into and out of the county each workday. Anticipated automobile commute problems from these imbalances will significantly worsen as future job growth continues to occur mostly in Los Angeles and Orange Counties.

Work Trip Travel Choice 1995 & 2020

<u>Description</u>	<u>% in 1995</u>	<u>% in 2020</u>
Drive Alone	82%	75%
Carpool	11%	12%
Transit	3%	5%
Telecommute/Work from Home	4%	7%
Bike/Walk	0%	1%

Source: OCTA. "Fast Forward Long Range Transportation Plan Action Element," May 1998.

- Examine regional jobs to housing ratios

Past proposals to adjust regional growth forecasts to incorporate policies that achieve improved regional balances in jobs and proximate housing have not been embraced. It is plausible that an enhanced employment base in San Bernardino and Riverside Counties could significantly reduce levels of intercounty travel during peak hour commute times. Orange County's employment forecast, which calls for nearly a million employees to be added between now and 2020, is being revisited as part of the county's effort to periodically revise its long-range growth forecast. Some have questioned whether achieving the projected levels of employment in the county is really practical.

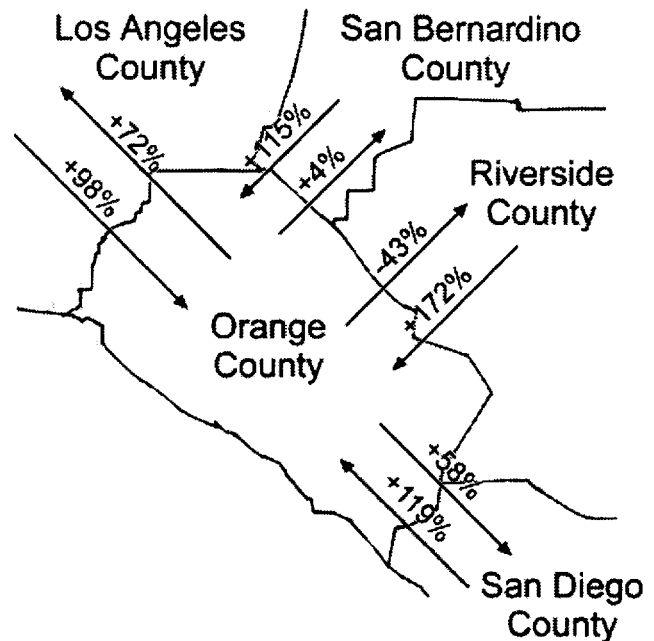
- Annex undeveloped lands to cities that will ultimately provide area services

The question of annexation is a complex one with several pros and cons. However, from the standpoint of comprehensive communitywide planning, the advantage to annexing adjacent rural and/or developing lands is that the city can be sure that such areas are laid out in a manner that fits in with the overall city plan. Instead of taking what's given to them after development occurs, city planners can incorporate communitywide design features, standards, and transportation networks up front if land is already within their jurisdiction, rather than having to try to apply ideas in a piecemeal fashion over time. Currently, cities often annex lands only after they are developed under the purview of county government.

Conclusion

Much has been written and implemented regarding "livable," "smart," "transit-oriented", and "neo-traditional" communities and design. This discussion only touches upon the range of ideas that can be applied to new and established communities in Orange County. Perhaps the most interesting point to be made is that the most modern, new-age

Intercounty Home to Work Person Trips: % Increase Between 1990 and 2020



Future increases in intercounty travel will easily exceed the freeway network's capacity to meet projected commute patterns

Source: OCTA Fast Forward Long-Range Transportation Plan Action Element, Executive Summary, Fall, 1997.

planning concepts being utilized and promoted under the above-mentioned headings aren't, in fact, new at all. Rather, planning ideas and implementation mechanisms from the past are successful in many European and pre-war American cities are being reexamined, revised, and repackaged in an attempt to reapply them to older areas in need of economic attention and to new areas in attempts to address new growth. The planning environment was not without smart growth voices during this country's and county's suburban boom years. People like John Alexander, in his 1963 book Urban Geography, stated simple and logical ideas that did not fit in with conventional planning wisdom at that time. "The premise here is that certain light industries, small in size, should not be banned from residential neighborhoods but should actually be welcomed. Workers can then go home for lunch. This is no small factor in a culture where so many mothers of

school-age children work in industry. Cross-town traveling can thereby be reduced, thus easing the city's traffic pains." [69]

Orange County's urban landscape reveals the character of the planning mentality that has been in place during the last half decade. Land use has been separated supposedly to improve the quality of life. Such separation has also propelled the regular approval of massive suburban tracts with the requisite automobile transportation network and investment of billions in public funds needed to support the planned urban landscape. Significant future growth will continue and although many believe that the south portion of the county will absorb most of the future growth, projections indicate otherwise. The northern and western cities will absorb more than 55% of the county's nearly 600,000 new residents; 48 % of the 227,000 new housing units; and over 60 % of the nearly 900,000 new employees projected between now and 2020. [70] Clearly, these numbers, especially as they pertain to future growth in the already developed northern, western and central portions of Orange County, indicate that the low density suburban and retail development planning practices used in the past will no longer be viable options, if for no other reason that land availability is at a premium. In other words, redeveloping Orange County will provide more complicated challenges than those that ever existed during its initial or "first phase" of development. The mentality of the past half century summarized in 1981 by a prominent Orange County commercial property developer explaining his desire for building in Orange County is nearly no more.

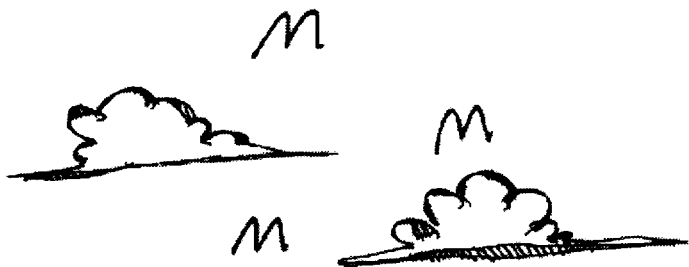
"Here [Orange County] there is flat, empty land, and people lining up to buy half-million dollar homes. Los Angeles is full. To build there, you have to tear down." [71]

Accommodating an additional 576,000 people, 226,950 housing units and 875,000 new jobs without seriously disrupting the quality of life is no small challenge. It would appear that the planning

practices that created a suburban Orange County are not the ones that should be priorities, utilized for its future growth into an urban Orange County. The amount of flat, empty land has been reduced. Orange County, like the Los Angeles of twenty years ago, is becoming "full." Absent a re-examination by policymakers of the distribution of projected growth, planners and decisionmakers are going to need to develop and implement approaches that can support the County without jeopardizing the "quality of life" that, to date, keeps much of Orange County a desirable place to live and work.

This is not to suggest that Orange County can only grow appropriately if smart communities' concepts are applied from here on out. Pressures from developers, market forces, lending institution policies and preferences, not in my backyard (NIMBY) constituents who may be opposed to higher densities, community and developer mindsets, outdated general plans, fiscalization of land use, lack of vision, the current and seemingly-apparent future automobile-dependent mentality, and supporting landscape are all factors that contribute to the difficulty of changing the way we think about how to accommodate future growth. [72] The existing county suburban lifestyle will not become completely passé with the corresponding demand for single-family residential units, for example, to disappear altogether.

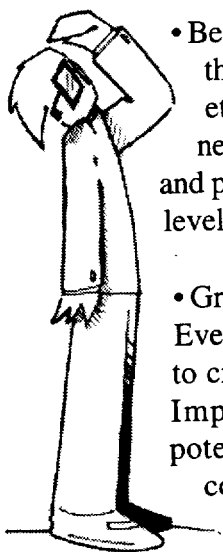
This report also does not suggest that the implementation of any or all of the smart growth concepts discussed or contained in the literature at large will guarantee economic viability and/or bring new life and vitality to communities. Simply planting a few trees, changing the look of light standards in a perceived blighted area, or creating 31 "old-towns" with upgraded street furniture will not significantly change constituent and commuter habits. Rather, planners and policymakers need to make a long-term commitment to examining how to deal with future growth and improving the quality of life for Orange County. At the micro-scale within cities, some cases might involve community revitalization in blighted and/or underutilized areas



to attract the local population. At the macro-scale, using regional approaches to formulate the backbone for planning transportation networks might cause changes in existing commuter patterns and habits rather than supporting them.

The following final points are among the most important concepts for cities to consider as they grow into the 21st Century and in implementing any of the approaches discussed in this report:

- **Involve the community:** Seek unconventional ways to involve area constituents and stakeholders in the future planning process. Hold meetings and walking tours at/ in areas slated for potential new growth and/or redevelopment. Involve agencies that will be impacted and/or serve new growth. Seek their support for new approaches where transit-oriented design concepts might be applicable.
- **Develop ideas that can be applied universally** throughout the community: See if specific project mitigations/ ideas that have been applied to a particular project can be applied citywide. Look at planning proposals for their cumulative impacts beyond the proposed development areas themselves to see how they tie in and flow with the immediate neighborhoods and the community at large.



- **Be visionary:** Recognize trends and think toward the future. Orange County's demographic and ethnic profile is changing rapidly. Planners need to make sure that planning assumptions and practices are able to accommodate expected levels of future growth.
- **Gradual change is still change; stay positive:** Even with rapid growth it took over 50 years to create Orange County's urban landscape. Implementation and any subsequent potential realization of smart community concepts will not come over night.

anti-tax limitations
REGULATIONS
resistance to
high density
community

mind set
MISTRUST OF
GOVERNMENT
existing
transportation
network
unpredictability of
public financing

Development
Standards
NIMBY
GENERAL PLANS
fiscalization
of land use
and competition
between cities
parochialism
no governmental
vision

JOBS/HOUSING
IMBALANCES
anti-growth
political differences
developer
mentality
FEAR
ECONOMY
NO COMMUNITY
parking
VISION
NO SUPPORT
FOR TRANSIT
lack of
Zoning Laws
positive media
regional growth

Barriers (real and perceived) to implementation of many smart growth concepts are numerous.

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